

**CONDENSING GAS WATER HEATER****Owner's Guide**

**Model BC3200RA
BC3200RA5**

**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 petrol or other flammable vapours 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.**

- **To be installed and serviced only by an authorised person**
- **This appliance is not suitable for use as a pool heater**

Thank you for purchasing this Bosch Condensing Gas Water Heater.

Before using, please:

Read this manual completely for operation instructions.

Confirm warranty and proof of purchase.

Keep this manual where it can be found whenever necessary.

This appliance must be installed in accordance with the manufacturer's installation instructions, AS 5601, NZ 5261, AS3500.4.2 and all Local Water, Building and Gas fitting regulations.

Bosch reserves the right to discontinue, or change at any time, the designs and/or specifications of its products without notice.

* Note : This appliance requires a minimum flow rate to operate of 2.5 litres/min., water fixtures with a flow rate of 7.5 litres/min. or higher are recommended.
For optimum performance we recommend installation of Bosch optional temperature controllers.

[Check Water Supply Quality]

If the water supply is hard, acidic or otherwise impure, treat the water with approved methods in order to ensure full warranty coverage.

Robert Bosch (Australia) Pty. Ltd.





Important Safety Information

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



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

■ 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



Prohibited

Vapours from flammable liquids will explode and catch fire causing death or severe burns.

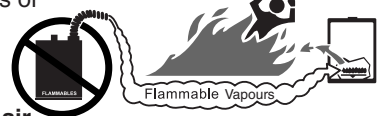
Do not use or store flammable products such as petrol, solvents or adhesives in the same room or area near the water heater.

Keep flammable products:

1. Far away from the water heater.
2. In approved containers.
3. Tightly closed.
4. Out of children's reach.

Vapours:

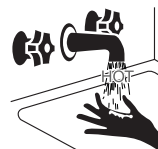
1. Cannot be seen.
2. Vapours are heavier than air.
3. Go a long way on the floor.
4. Can be carried from other rooms to the main burner by air currents.



Prohibited

Hot Water Heater temperatures over 50 °C can cause severe burns instantly or death from scalding.

Children, disabled and elderly are at the highest risk of being scalded. Feel water temperature before bathing or showering. Temperature limiting valves are available, ask licensed installer.



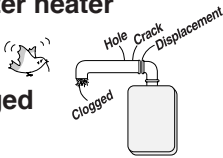


(Continued)



Prohibited

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



Be sure to do.

After the water heater has been out of use for a long time or after replacing the neutralizer with a new unit, make sure that you fill the neutralizer unit with water. This is to prevent dangerous exhaust gases from entering the building. (Refer to page 28 for further instructions.)



Prohibited

Do not allow anyone to change the water temperature while hot water is being used.

To prevent scalding, do not change the water temperature to a higher setting.



WARNING



No flame.

A. This water heater does not have a pilot. It is equipped with an ignition device that automatically lights the burner. Do not try to light the burner by hand.

B. 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.

C. Use only your hand to turn the gas valve knob. Never use tools. If the knob will not turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this water heater if any part has been under water. Immediately call a qualified service technician to inspect the water heater and to replace any damaged parts.



Be sure to do.

When a gas leak is noticed:

1. Stop use immediately
2. Close the gas valve
3. [When installing indoors] Open windows and doors



Be sure to do.

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 supply valve.
4. Call the nearest Bosch agent



Prohibited

Explosion Hazard ;

If the temperature and pressure relief valve is dripping or leaking, have a qualified service technician replace it. Do not plug or remove the valve.

Failure to follow these instructions can result in fire or explosion, and personal injury or death.

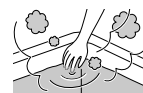


High Temperature.

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



Check the temperature before stepping into the bath tub.



Prohibited

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

(Continued)



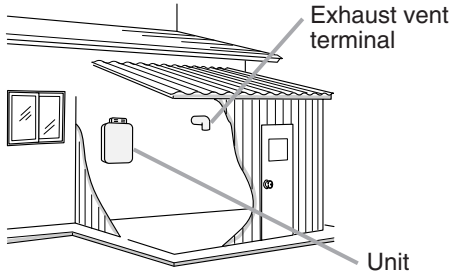
Important Safety Information

(Continued)



Prohibited

Do not place the exhaust vent terminal in an indoor environment by means of adding walls and ceiling (Do not enclose using corrugated sheets, etc.)



Carbon monoxide poisoning or fire may occur as a result.



Prohibited

Carbon Monoxide Poisoning Hazard. Do not install this water heater in a mobile home, recreation vehicle or on a boat.



Prohibited

Do not store or use petrol or other flammable vapors and liquids in the vicinity of this or any other appliance.



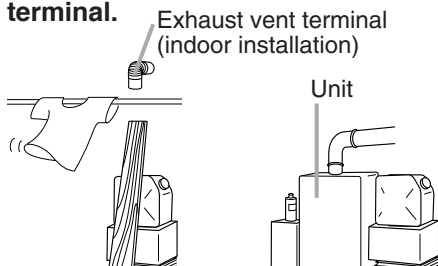
Prohibited

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



Prohibited

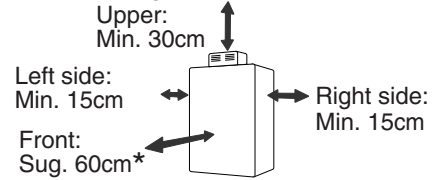
Do not place combustibles such as laundry, newspapers, oils etc. near the heater or the exhaust vent terminal.



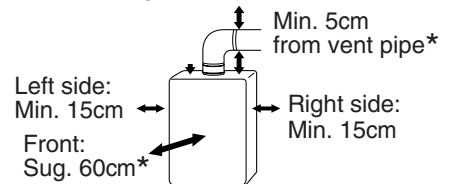
Be sure to do.

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

[When installing outdoors]



[When installing indoors]

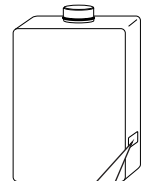


* Indicates suggested clearances for maintenance.

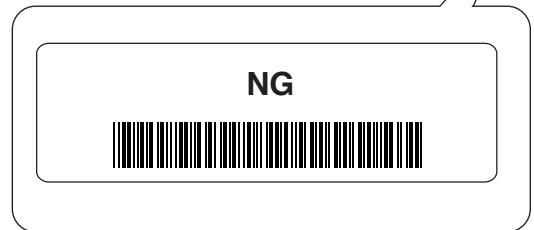


Be sure to do.

Be sure the gas matches the gas on the data plate (inside of frontcover) or gas type label (right side of casing).



For NG Gas



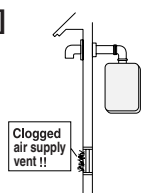
Be sure to do.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.



Be sure to do.

[When installing indoors] Check the air supply vent for dust or obstructions.





(Continued)



Prohibited

If this unit will be installed in a beauty salon or other location where hair spray or aerosols will be used, locate the unit in a separate area that is supplied with fresh air from outdoors.



Prohibited

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



Prohibited

Do not allow small children to play unsupervised in the bathroom. Do not allow small children to bathe unsupervised.



Don't touch with a wet hand.



Electric Shock.

Do not touch the power cord with wet hands.



Be sure to do.

Consult the nearest Bosch agent if the water heater location needs to be changed.



Don't disassemble the equipment.

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



CAUTION



Ground.

Be sure to electrically ground the unit.



Be sure to do.

Keep power cord free of dust.



Prohibited

Do not use the water heater for other than its intended use.



Prohibited

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.



Be sure to do.

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



Prohibited

Do not turn off the water heater while someone is showering.



Prohibited

Do not cover the water heater and the exhaust vent terminal, store trash or debris near it, or in any way block the flow of fresh air to the unit.



Prohibited

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



Don't touch.

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



Prohibited

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



Important Safety Information

CAUTION

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.

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

Do not disassemble the remote controller.

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

This may cause deformation.

Do not get the remote controller wet.

Although it is water resistant, too much water can cause damage.

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.

Preventing damage from freezing (→P26)

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.

Take necessary measures to prevent freezing of water and leakage of gas when leaving the unit unused for long periods of time. (→P27)

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



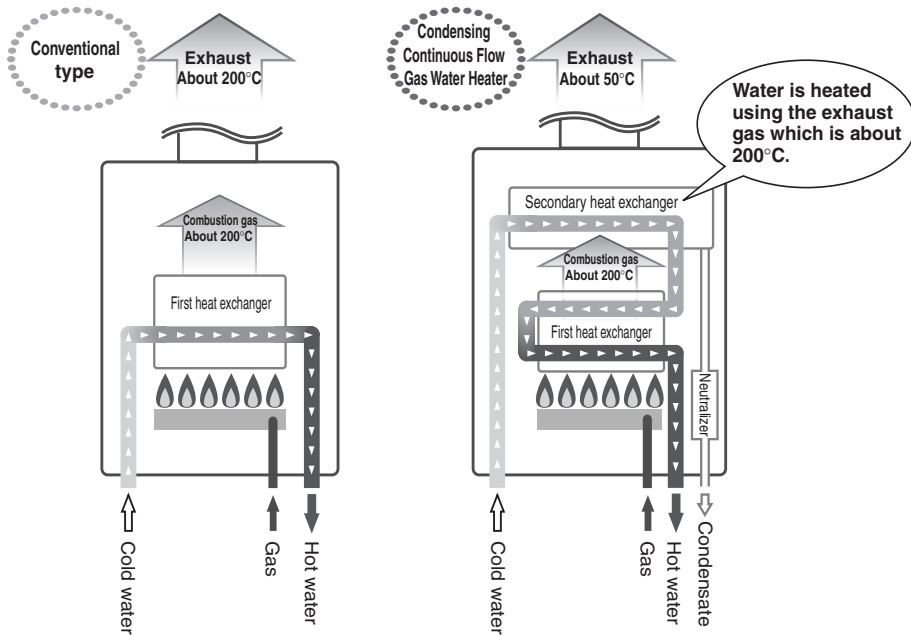
Contents

Important Safety Information	2
Contents	7
Overview of Condensing Continuous Flow Gas Water Heater	8
General Parts	
Main Unit	9
Names and Functions of Controllers	
Main Remote Controller (RCM3211)	10
Waterproof Sub Remote Controller (RCS3211)	11
Initial Operation	12
How to Use	
When using RCM3211	
Running Hot Water	13
Setting Hot Water Temperature	14
Filling Up the Bath	16
Clock Adjustment	17
Other Setting Options	18
Confirmation Beeper On/Off	20
When using RCS3211	
Running Hot Water	21
Setting Hot Water Temperature	22
Confirmation Beeper On/Off	24
No remote controller case	
Running Hot Water	25
Preventing Damage from Freezing	26
When Unused for an Extended Period	27
Regular Maintenance	29
Troubleshooting	32
Follow-up Service	36
Specifications	37
Manufacturer's Warranty	39



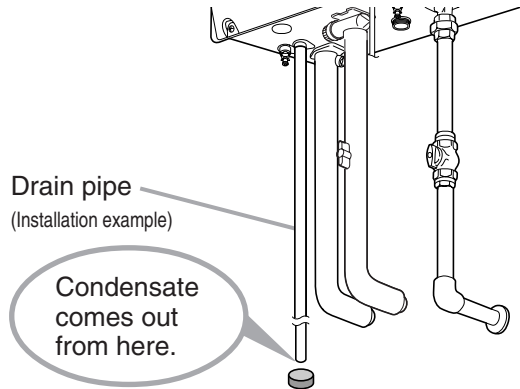
Overview of Condensing Continuous Flow Gas Water Heater

This water heater is a high efficiency, fully condensing appliance. Unlike a traditional continuous flow 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.



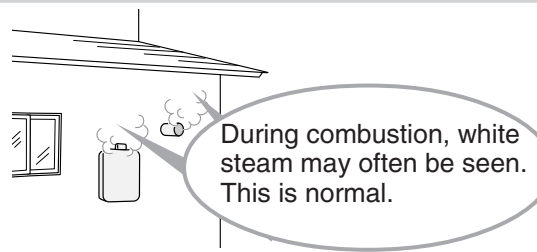
The condensing continuous flow gas water heater discharges condensate.

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 continuous flow gas water heater tends to show white steam.

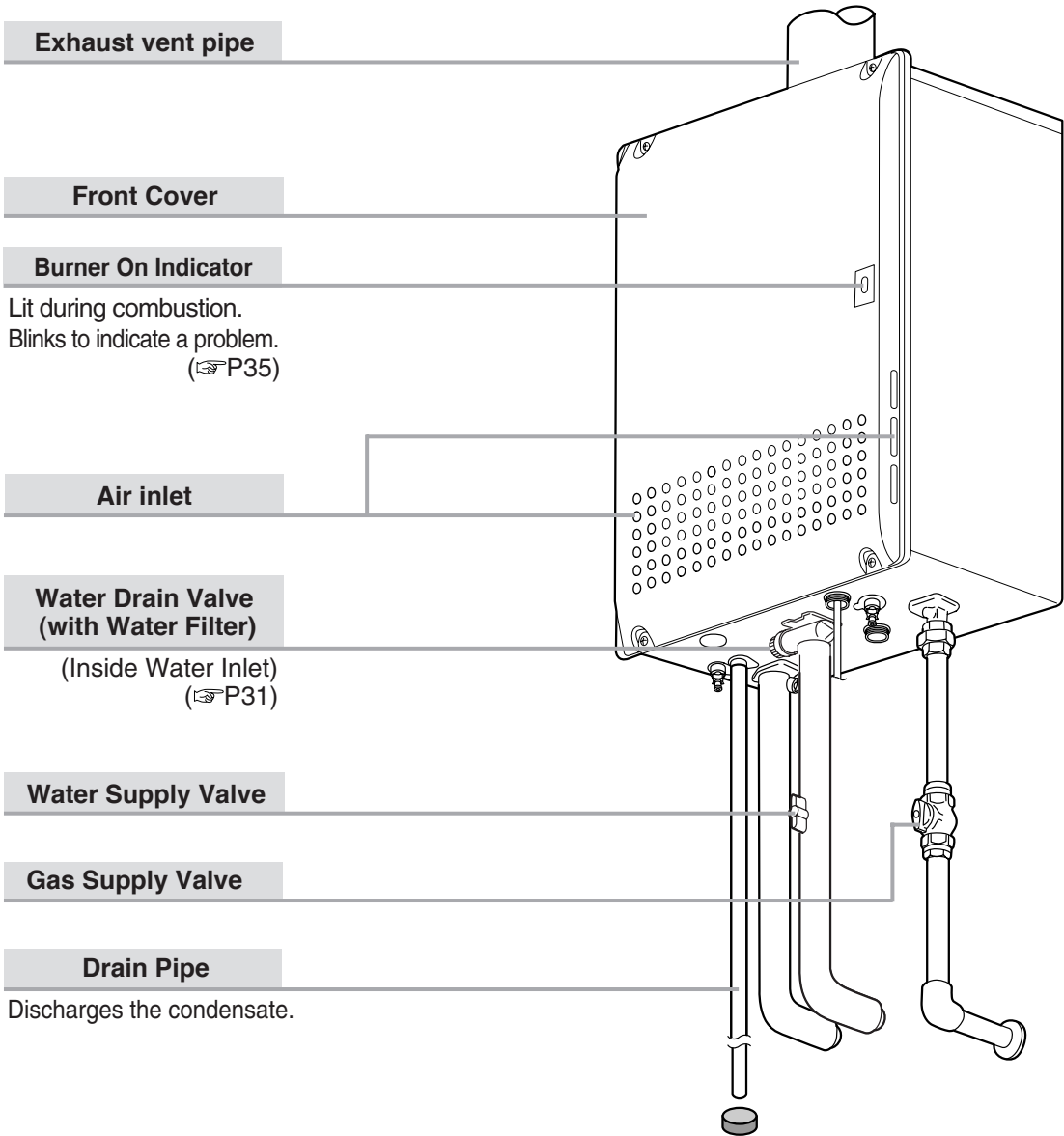
After the exhaust gas passes through the secondary heat exchanger, it becomes low in temperature and moisture rich which tends to produce steam at the vent discharge terminal. This is a normal occurrence.





General Parts

Main Unit

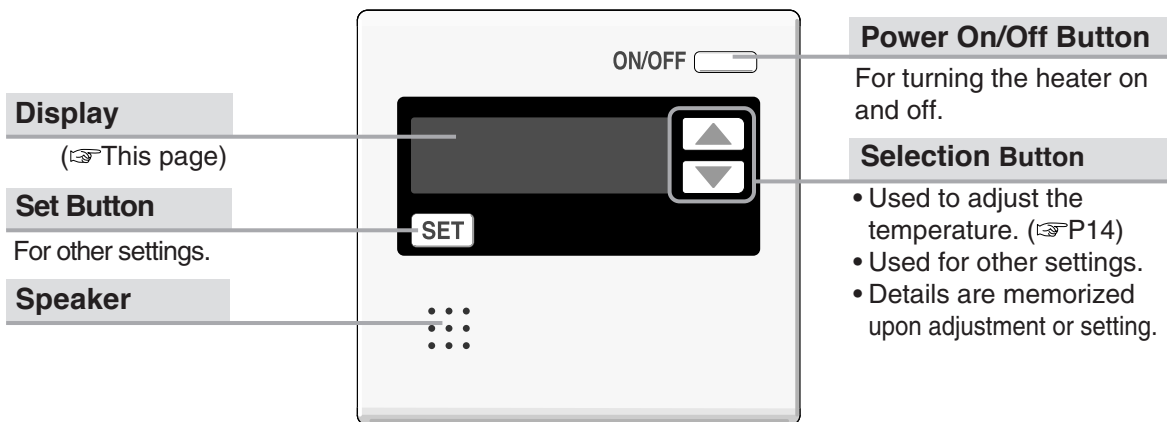


· **The above illustration shows an example of installation.**
The exact installation configuration may be slightly different.



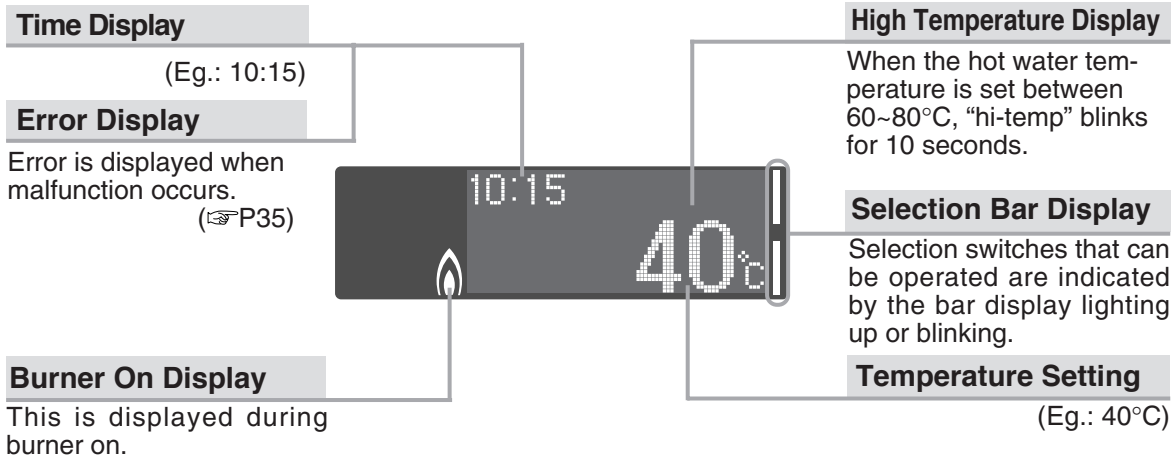
Names and Functions of Controllers

Main Remote Controller (RCM3211) <Optional>



● 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 burning out ●

- In order to prevent the screen burning out, 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) and hot water temperature scroll sideways.



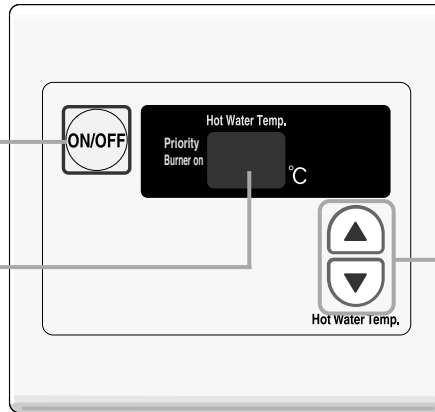
Waterproof Sub Remote Controller (RCS3211) <Optional>

Power On/Off Button

For turning the heater on and off.

Display

(☞ This page)



Temperature setting Button

Used to adjust the temperature. (☞ P22)

● Display ●

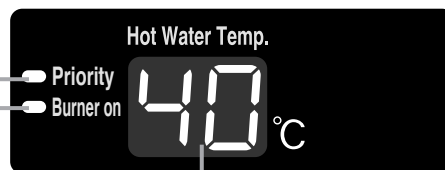
The illustration below shows the remote controller display. What is actually displayed depends on how the water heater is set.

Priority Indicator

When this indicator is lit, the hot water temperature can be set.

Burner On Indicator

This is displayed during burner on.



Temperature Setting

(Eg.: 40°C)

Error Display

Error is displayed when a malfunction occurs.

(☞ P35)

Note: Avoid frequent interruptions to the power supply.

The operation of the BC3200RA power supply is recorded in 10 hour increments, during this time the combustion is also recorded. If the power supply is interrupted near the end of a 10 hour block it will create a time lag and prematurely notify you the neutralizer requires servicing.

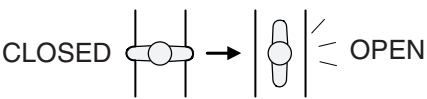


Initial Operation

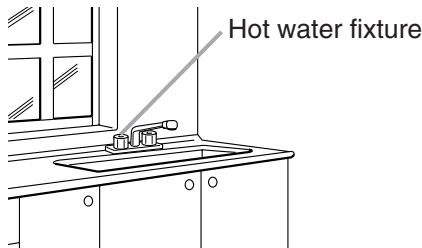
Before the first use of your water heater, make the following preparations.

Follow steps **1 through 4.**

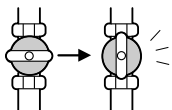
1 Open the water supply valve.



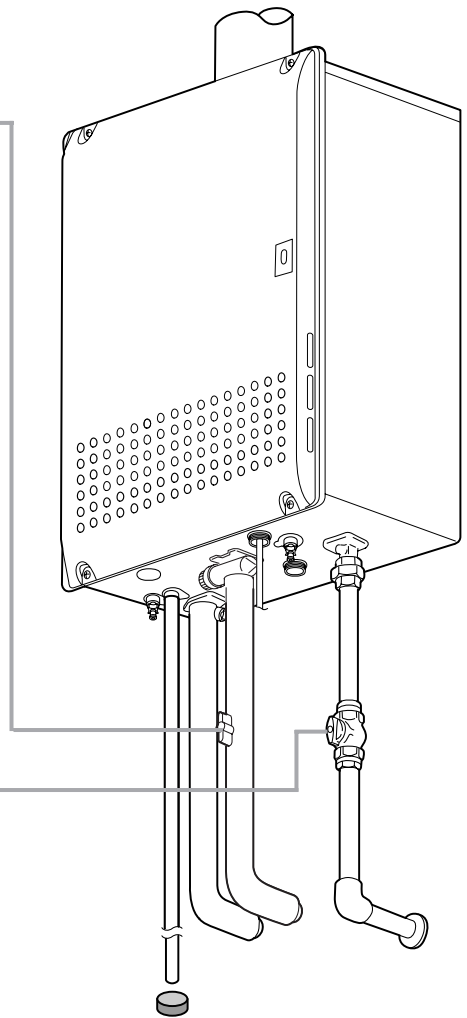
2 Open a hot water fixture to confirm that water is available, and then close the fixture again.



3 Open the gas supply valve.



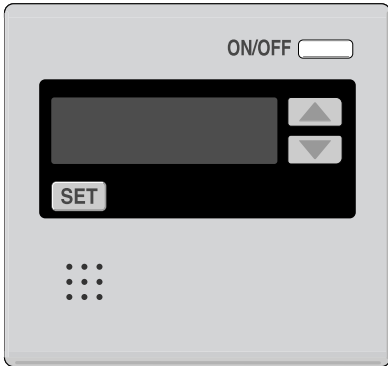
4 Turn on the power.



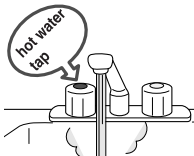
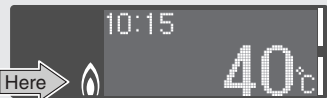




When using RCM3211

Running Hot Water



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>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



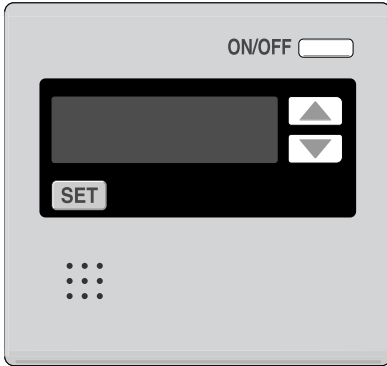
When the user is taking the shower, it will be dangerous if someone else presses the sub remote controller to change the temperature or to turn off the power switch.







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.



When using RCM3211

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



When the user is taking the shower, it will be dangerous if someone else presses the sub remote controller to change the temperature or to turn off the power switch.

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.



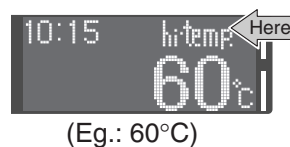
● Approximate hot water conditions ●

															(°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); ●

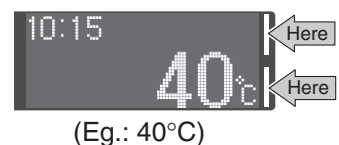
- When a high temperature is set, the readout on the right is shown.
- Please check the temperature displayed before using any hot water. Be especially careful using any hot water after any previous setting of between 60 - 80°C.



Flashing Temperature Display for about 10 seconds to Temperature on.

● Please switch to the priority setting if the temperature cannot be adjusted (when an additional remote controller is attached). ●

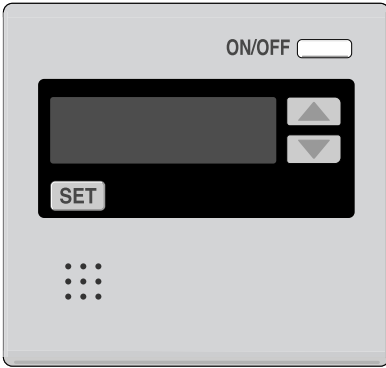
- If the power switch on the remote controller is turned “on”, the remote controller has priority in adjusting the temperature.
- When the temperature can be adjusted (console has priority), the display screen is shown as per right.
- If the temperature cannot be adjusted, turn the power switch “off”, and then turn it “on” again.







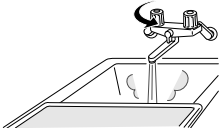

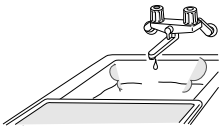
When using RCM3211

Filling Up the Bath



On this Display	Operation	Description
-----------------	-----------	-------------

Preparation Insert the bathplug into the plughole.

- | | | | |
|----------|--|---|--|
| 1 | | Press the ON/OFF  button to turn it "On". | * The ON/OFF  is lit. |
| 2 |
(Display example) | Turn on hot water.
 | * Please set to the required temperature when using thermostat controlled water mixing valves.  |
| 3 | When the bath is full, turn off the taps. |  | |



WARNING



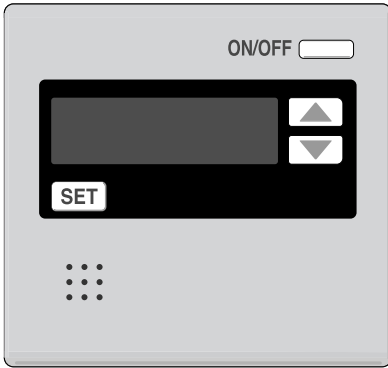
Check the bathwater temperature with your hand before getting into the bath.











To prevent scalding.



When using RCM3211

Clock Adjustment



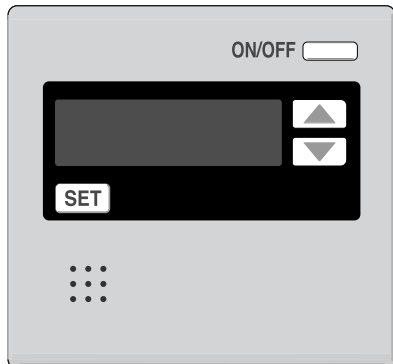
On this Display	Operation	Description
1 	Press the ON/OFF  button to turn it "On".	* The ON/OFF  is lit.
2  (Eg.: 40°C)	Press the  button to change the display until "time set" is shown.	
3 	Use the   buttons to adjust the clock.	* The time changes in 1-minute increments with each press on the button,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

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.



When using RCM3211

Other Setting Options



Switching scroll display

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

Draining the unit

This is set to drain the unit. (P27)

On this Display

1



2

[Scroll display] (P10)

scroll display	yes
display	no

[Draining the unit] (P27)

drain the heater	yes
	no

[Maximum temperature setting] (P15)

max temp.	80°C
-----------	------

3

yes

Scroll display is turned on.

no

Scroll display is turned off.

yes

Condition is suitable for draining the unit. (P27)

no

Stops draining the unit.

80°C

75°C

▪ (in 5°C increments)

50°C

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 yes
diagnosis

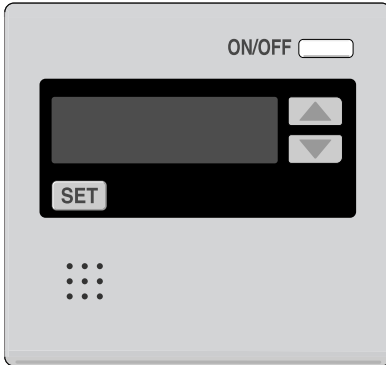
▶ Power is switched "Off" again.

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



When using RCM3211

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.

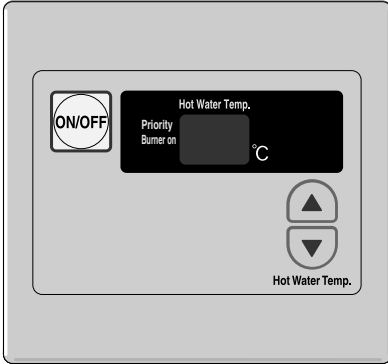
* Initial factory setting is with sound.

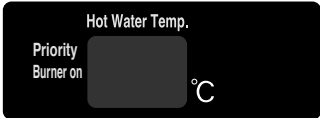


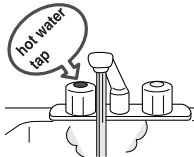
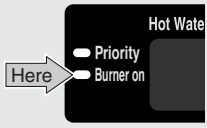
Operation	Description
1 Press the ON/OFF <input type="checkbox"/> button for about five seconds. < Completion of setting >	* Setting is possible regardless of whether the power switch is ON/OFF.



When using RCS3211

Running Hot Water



On this Display	Operation	Description
<p>1</p> 	<p>Press the  button to turn it "On".</p>	<p>* Hot water supply temperature is displayed.</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 details ></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



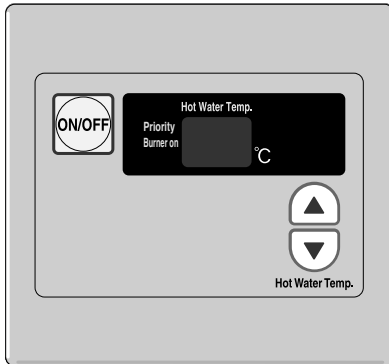
While the shower is being used, no one other than the user should change the temperature, the power switch must not be turned "off", when using sub remote controller.

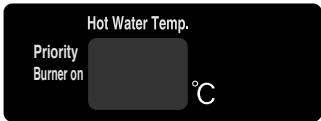



This is to prevent scalding if the temperature rises. Conversely, if the temperature reduces or the power switch is turned "off", the user may be upset when the water suddenly becomes much colder.



When using RCS3211

Setting Hot Water Temperature



On this Display	Operation	Description
<p>1</p> 	<p>Press the  button to turn it "On".</p>	<p>* Hot water supply temperature is displayed.</p>
<p>2</p>  <p>(Eg.: 40°C)</p>	<p>Use the  buttons to adjust the temperature.</p>	



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", when using sub remote controller.

This is to prevent scalding if the temperature rises. Conversely, if the temperature reduces 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 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.

● Please switch to the priority setting if the temperature cannot be adjusted. ●

- If the power switch on the remote controller is turned “on”, the remote controller has priority in adjusting the temperature.
- When the temperature can be adjusted (console has priority), the display screen is shown as per right.
- If the temperature cannot be adjusted, turn the power switch to “off”, and then turn it “on” again.

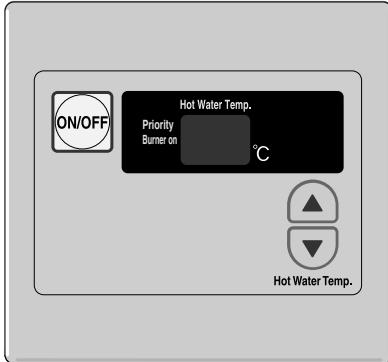


(Eg.: 40°C)



When using RCS3211

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  button for about five seconds.

< Completion of setting >

* Setting is possible regardless of whether the power switch is ON/OFF.



No remote controller

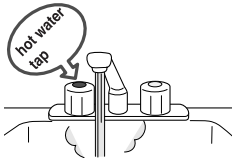
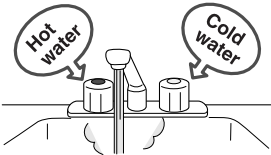
Running Hot Water

The water temperature will be set at 55°C (BC3200RA5 will be set at 50°C).

**WARNING**

Whenever using hot water, such as when using the shower, first test the hot water temperature by hand.

To prevent scalding.

Operation	Description
1 Turn on hot water. 	
2 Temperature adjustment for hot water supply 	
3 Turn off the hot water tap after use.	

Contact your installer if you wish to change the temperature.

If the temperature is set at 75°C - 85°C, use thermostat-controlled water mixing valves to prevent scalding when using other taps.

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 using 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 Bosch Service Dealer.

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 P12 ("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

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

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.

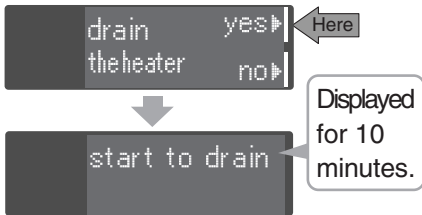
To prevent scalding.

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

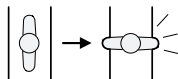
Preparation A bucket for draining water.

Drainage using the remote controller RCM3211

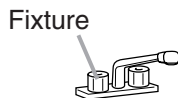
- 1 Follow the procedure on Pgs. 18 - 19, and set "Drain the heater" to "yes".



- 2 Close the water supply valve.



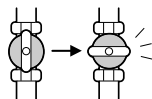
- 3 Fully open all hot water fixtures.



- 4 Open all cleanout plugs by turning them to the left.
(Position of the cleanout plugs → P28)
* Draining starts.

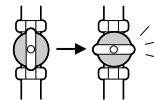
- 5 When the water is completely drained, replace all drain plugs and close the hot water fixtures.

- 6 Close the gas valve.

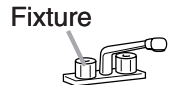


Manual draining

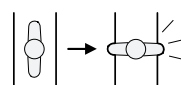
- 1 Close the gas valve.



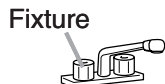
- 2
 1. Turn the power switch "On".
(If there is no remote controller, make sure that the power is plugged in.)
 2. Open the hot water tap fully, leave it in that position for at least one minute, and then turn off the tap.
* For conjunct setting: Allow at least one minute per unit
* Error display <11> 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.



- 4 Fully open all hot water fixtures.



- 5 Open all cleanout plugs by turning them to the left.
(Position of the cleanout plugs → P28)
* Draining starts.

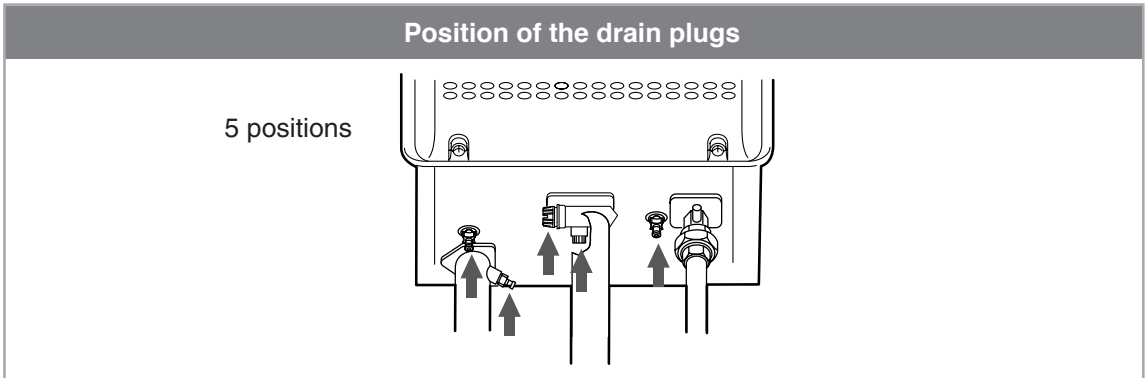
- 6 When the water is completely drained, replace all drain plugs and close the hot water fixtures.

(Continued)

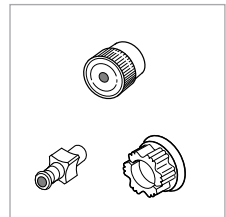


When Unused for an Extended Period

If the water heater will not be used for a long period of time, Drain the water-2.



- * The shapes of the drain plugs are as on the right.
- * The drain plugs may not be clearly visible as they are partially hidden behind the pipe insulation.
- * Water may not drain out fully even though the drain plugs are loosened, depending on the pipe arrangement. In this case, fully remove the drain 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 P12 "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 15 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 neutralizer with a new unit, make sure that you fill the neutralizer unit with water. This is to prevent dangerous exhaust gases from entering the building. Failure to fill the neutralizer unit could result in severe personal injury or death. (By performing step 4 as described above, the neutralizer unit will automatically fill itself with water.)



Regular Maintenance

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 unit is still very hot within a short period of time after use.

Inspection (to be performed periodically)



Make sure that no combustible material (such as paper, washing, benzene, spray can) is placed on or near the unit or exhaust vent and flue terminal.

➔ Do not place combustibles on or around the unit or the flue terminal.



Make sure that no black soot covered in the flue terminal and exhaust vent.

➔ If any is found, please contact Bosch agent.



- * Is there any abnormality in external appearance discoloration or flaws?
- * Is there abnormal sound during operation?
- * Is there any water leak from the appliance and pipes?

➔ If any of the above is found, please contact Bosch agent.

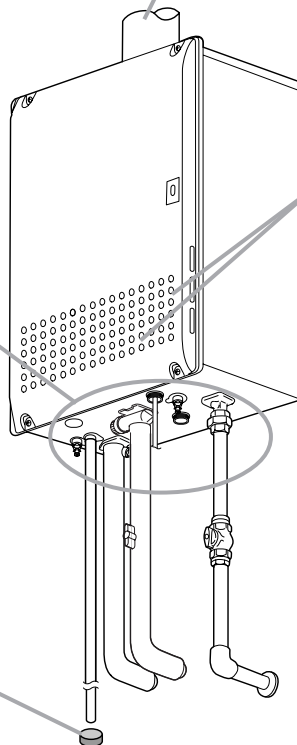


Make sure that the exhaust vent or flue terminal and air inlet is not blocked by dust.

➔ If so, please clean it.



For blockage at the drain pipe discharge.



Regular Maintenance

Cleaning (to be performed periodically)

● Main Unit ●

- For soiling on the unit exterior, wipe with a wet cloth and dry thoroughly. For stubborn dirt, use neutral detergent.
- If the unit is installed in a seaside area and is subject to sea breezes, the main unit and connecting pipes may rust. Rust inside the appliance will affect adversely its operation, so a check-up is recommended.

● Remote Controller ●

For soiling on the surface of the remote controller, use a damp cloth.

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

This may cause deformation.

CAUTION 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.

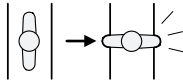


● Cleaning filter of the drain plug ●

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

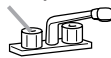
- To avoid burns, wait until the equipment cools down before draining the water.
The appliance will remain hot after it is turned off.
- Drain water into a bucket.

1. Close the water supply valve.



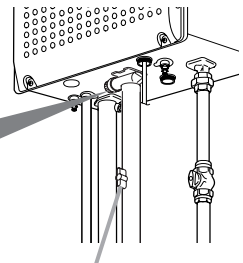
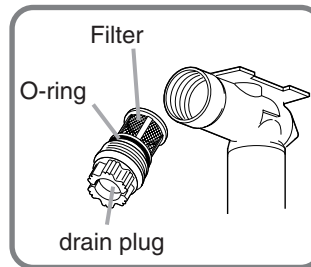
2. Open all hot water tap.

hot water tap



3. Remove the drain plug. (Note 1)

4. Wash the filter area in water using a toothbrush. (Note 2)



Water supply valve

5. Reinsert the drain plug as before.

6. Close all hot water taps.

7. Open the water supply valve and check that water does not leak from the drain plugs or water drain valve.

(Note 1) Cold (or hot) water is discharged at this stage.

(Note 2) If the filter is removed from the drain plug, take care not to lose the O-ring between the drain plug and the filter.

● Regular check-ups are recommended. ●

Even if there is no apparent problem with usage, a regular check-up is recommended about once a year to ensure safe long-term use. Please contact Bosch agent for details.

Troubleshooting

Problems concerning temperature

<p>No hot water is supplied even though the hot water tap is turned on (open).</p>	<ul style="list-style-type: none"> • Are the gas valve and water supply tap fully open? • Has the water supply been shut down? • Is the hot water supply tap fully opened? • Has the gas meter (microcomputer meter) shut off the gas? (Can you use any other gas-powered equipment, such as your gas cooker?) • Is the drain plug filter clogged? (→P31) • Is the power turned “On”?
<p>No hot (or cold) water is supplied even though the hot water tap is turned on (open).</p>	<ul style="list-style-type: none"> • Has the water supply been shut down?
<p>No hot water is supplied at the set temperature.</p>	<ul style="list-style-type: none"> • Is the hot water supply tap fully opened?
<p>The warm water is too hot.</p>	<ul style="list-style-type: none"> • Are the gas valve and water supply tap fully opened? • When a remote controller is installed, is the temperature setting correct? (→P15, 23) • If the ambient water temperature is high, when a low temperature setting is used, the supplied water temperature may be higher than the set temperature. • If using small amounts of hot water, the water may be hotter than the set temperature.
<p>The hot water outlet temperature is lower than the set temperature.</p>	<ul style="list-style-type: none"> • Are the gas valve and water supply tap fully opened? • In case there is a remote controller, check if the temperature setting correct? (→P15, 23) • When the water temperature is low, set temperature may not be discharged when discharging large amounts of warm water. For the discharge of water at the set temperature, lower the volume of water discharge by partially closing the water supply tap.
<p>Water becomes cold when the tap is nearly shut.</p>	<ul style="list-style-type: none"> • Burner is extinguished when the flow of water from the hot water supply tap becomes 2.0 liters of less per minute. For stable temperature of water, increase the volume of water discharge by further opening the water supply tap.
<p>< If there is an additional remote controller... > Cannot set water temperature</p>	<ul style="list-style-type: none"> • Does the remote controller being used have priority? (→P15, 23)



Problems concerning volume of hot water

The volume of hot water discharged from the hot water tap varies

- When using hot water, the volume discharged may decrease when hot water is used somewhere else. Also depending on the pressure of the water line and the piping conditions, the volume of hot water discharged may drastically decrease or even stop. In this, the volume of hot water discharged will become stable again after waiting some time.
- There are some types of hot water taps that discharges large volumes of hot water at first but stabilizes after time.
- In order to stabilize the temperature of hot water, the unit controls the volume of hot water by discharging little at first and discharging fully when the temperature becomes stable.

Poor supply of hot water

- Are the filters at the drain plugs clogged? (→P31)

Problems concerning the remote controls

The power lamp is not lit.

- Has the power been cut?

Clock shows "0:00".

- 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. (→P17)

After the power is cut, the hot water supply temperature is different.

- If using the remote controller RCS3211, the hot water temperature display reverts to the factory setting, so please check it.

The display on the remote controller moves continuously.

- In order to prevent the screen from burning out, 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.

- Has the maximum temperature setting been changed? (→P18-19)

Troubleshooting

Problems concerning sound

Even after use has finished, the whirring of a fan can be heard for a while.

Whenever the power switch is turned “On” or “Off”, a hot water tap is opened or closed, or after the unit is used, the sound of a motor spinning may be heard.

- The sound is from the unit operating for fast ignition and quicker stabilization of water temperature during reuse.

Others

Burner is extinguished during use

- Are the gas valve and water supply tap fully opened?
- Has the water supply been shut down?
- Is the hot water tap opened sufficiently?
- Is there a cut-off of gas by the gas meter?
(Can any other gas-powered equipment, such as a cooker, be used?)

White vapor is emitted from the exhaust vent or flue terminal on cold days.

- The combustion gas which had been collected heat at the secondary heat exchanger is low-temperature and has high moisture content, so it builds up condensation with the outside air and looks like white steam.

Hot water seems cloudy

- This is simply air that had been dissolved in the water being forced out in the form of minute bubbles when heated, and is totally harmless.

Water is discharged momentarily from the trap plug of the unit (pressure relief device)

- When there is high pressure within the unit, the pressure relief device will operate and droplets of water may be noticed from the trap plug.

**Water seems bluish
The bath tub or wash basin turned blue**

- Your bathtub and washbasin may look slightly bluish due to minute amounts of cuprous ions and fat (lime scale), but this poses no problem to your health. This can be prevented by frequent cleaning of the bathtub and washbasin.

Frequent water discharge from the drain pipe.

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



Please check the failure display on the remote controller or the combustion lamp on the main body.

[Remote controller]

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.



(if using RCM3211)

Failure display blinks

(This display is an example.)



(if using RCS3211)

Display	Description	Remedy
*(F) 11	Ignition failure	Check whether the gas supply is off. Reset by turning off and on the power on/off button of remote controller. It turns back to normal when no error displays after running hot water. If the error still persists, call service.
*(F) 29	Clogging of neutralizer	Call service.
*(F) 90	Combustion Abnormality (burner sensor detects high temperature)	Reset by turning off and on the main power. If the error still persists, call service.
*(F) 92	The neutralizer needs to be replaced soon.	Call service.
*(F) 99	Combustion Abnormality (appliance shuts down)	Reset by turning off and on the main power. If the error still persists, call service.

*(F) ## indicates an error code from the secondary unit in a quick connect (2-unit) pack.

[Combustion lamp]

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

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



Follow-up Service

Requesting Service

First follow the instructions in the troubleshooting section (➔ P32 to P35).
If the error is not corrected, contact Bosch Service Department at 1300-30-70-37.

We will need to know:

The Model BC3200RA or BC3200RA5

(Check the rating plate)

Date of purchase (see the warranty)

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

Your name, address, and telephone number

Desired date of visit



Warranty

For repairs after the warranty period, there will be a charge on any service, and service will only be performed if the unit is deemed repairable.
See warranty Document on page 40.

Period of Time for Stocking Repair Parts

Bosch will stock repair and maintenance parts for this unit as required for a reasonable time the date of original manufacture.

Reinstallation

If you want to reinstall the appliance at a different location, confirm that the gas and power supply indicated on the data plate are available at the new location. If you are not sure, consult the local utility company.

If you move to a region that uses a different type of gas, conversion and adjustment of the appliance will be necessary.



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		BC3200RA / BC3200RA5
Approval certification number		AGA 6743 G
Type	Installation	Indoor / Outdoor, Wall Mounted
	Air Supply/Exhaust	Power Flue
Ignition		Direct Ignition
Operating Pressure		200 -1,000 kPa
Minimum Flow Rate		2.5 L/min.
Dimensions		615mm (Height) x 464mm (Width) x 240mm (Depth)
Weight		33 kg
Water Holding Capacity		1.9 L
Connection Sizes	Water Inlet	R 3/4 (20mm)
	Hot Water Outlet	R 3/4 (20mm)
	Gas Inlet	R 3/4 (20mm)
	Water Outlet (Drain water)	R 1/2 (15mm)
Power Supply	Supply	230 / 240 VAC (50Hz)
	Consumption	126W Freeze Prevention 175W
Relief valve pressure setting		1,600 kPa
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, Electric Leakage Prevention Device, Lightning Protection Device (ZNR), Overheat Prevention Device, Freezing Prevention Device, Fan Rotation Detector
Accessories		Anchoring Screws

Performance

Item		Maximum Performance	Minimum Performance
Gas Consumption	NG	217 MJ/hr	11 MJ/hr
	LP	217 MJ/hr	11 MJ/hr
Maximum Hot Water Capacity	25°C Rise	32 L/min.	
Capacity Range		2.5 - 42 L/min.	
Temperature Settings		BC3200RA	37 - 48°C (In 1°C intervals), 50, 55, 60, 65, 70, 75, 80°C (19 Options)
		BC3200RA5	37 - 48°C (In 1°C intervals), 50°C (13 Options)



WATER QUALITY

All Bosch water heating appliances are constructed from high quality materials and components and all are certified for compliance with relevant parts of Australian and New Zealand gas, electrical and water standards.

Whilst Bosch water heaters are warranted against defects, the warranty is conditional upon correct installation and use, in accordance with detailed instructions provided with the heater. In the case of the water supplied to the heater, it is important that the water quality be of acceptable standard.

The water quality limits/parameters listed in water quality table are considered acceptable and generally, Australian and New Zealand suburban water supplies fall within these limits/parameters.

In areas of Australia and New Zealand where water may be supplied, either fully or partly, from bores, artesian wells or similar, one or more of the important limits may well be exceeded and the heater could, therefore, be at risk of failure.

Where uncertainty exists concerning water quality, intending appliance users should seek a water analysis from the water supplying authority and in cases where it is established that the water supply does not meet the quality requirements of the water quality table, the Bosch warranty would not apply.

WATER QUALITY TABLE

Maximum levels

pH	Saturation Index(LSI) (langelier)	Total Hardness	Chlorides	Sodium	Iron
6.5-9	+0.4 to Minus 1.0 @ 65C	200mg/l	250mg/l	180mg/l	1mg/l



**Robert Bosch (Australia) Pty Ltd (Bosch)
Manufacturer's Warranty
(Applicable for purchases from 1 January 2012)**

All Bosch hot water units are carefully checked, tested and subject to stringent quality controls.

1. Warranty

Bosch offers, at its option, to repair or exchange this Bosch hot water unit or the relevant part listed in clause 2 below at no charge, if it becomes faulty or defective in manufacture or materials during the warranty period also stated in clause 2. This warranty is offered in addition to any other rights or remedies held by a consumer at law.

2. Warranty periods & coverage

- (a) Domestic applications: 3 years (parts and labour)
- (b) Heat exchangers used in domestic applications: 10 years (part only)
- (c) Commercial applications: 2 years (parts and labour)
- (d) Heat exchangers used in commercial applications: 5 years (part only)

All warranty periods commence on the date of purchase of the hot water unit by the end-user. However, where the date of purchase by the end-user is more than 24 months after the date of manufacture, all warranty periods will automatically commence 24 months after the date of manufacture.

3. Warranty exclusions

This warranty is VOID if any damage to or failure of the hot water unit is caused wholly or partly by:

- (a) faulty installation
- (b) neglect, misuse, accidental or non-accidental damage, failure to follow instructions
- (c) use of the unit for purposes other than which it was designed or approved
- (d) unauthorised repairs or alterations to the unit without Bosch's consent
- (e) use of unauthorised parts and accessories without Bosch's consent
- (f) use of non-potable water or bore water in the hot water unit (see product instructions for further details)
- (g) continued use after a fault becomes known or apparent.

This warranty DOES NOT include:

- (a) costs of consumables or accessories
- (b) wear and tear, normal or scheduled maintenance
- (c) to the extent permitted by law, any damage to property, personal injury, direct or indirect loss, consequential losses or other expenses
- (d) changes in the condition or operational qualities of the hot water unit due to incorrect storage or mounting or due to climatic, environmental or other influences.

NOTE: Any service call costs incurred by the owner or user of the hot water unit for any matter not covered by the terms of this warranty will not be reimbursed by Bosch, even if those costs are incurred during the warranty period. If the hot water unit is located outside the usual operating area of a Bosch service agent, the agent's travel, freight or similar costs are not covered by this warranty and must be paid by the owner or user of the hot water unit.

4. Warranty conditions

- (a) Proof of purchase may be required.
- (b) The hot water unit must be installed by an authorised and licensed installer.
- (c) Proof may be required of the date of installation and correct commissioning of the hot water unit has been carried out to Bosch's satisfaction (such as a certificate of compliance).
- (d) Repair or replacement of the hot water unit or any parts under this warranty does not lengthen or renew the warranty period.



- (e) This warranty is not transferable and is only offered to the original purchaser of the hot water unit.
- (f) No employee or agent of Bosch is authorised to amend the terms of this warranty.
- (g) This warranty only applies to Bosch hot water units purchased from an authorised reseller and installed in Australia or New Zealand.
- (h) To the extent that any condition or warranty implied by law is excludable, such condition or warranty is excluded.

5. How to lodge a warranty claim and warranty procedure

- (a) Warranty claims must be made with the Bosch Customer Contact Centre (Australia: ph 1300 307 037; New Zealand: ph 0800 543 352). Please be ready to provide the model and serial numbers, date of installation, purchase details and a full description of the problem.
Warranty claims must be made before the end of the warranty period.
- (b) All warranty service calls must be conducted by an authorised Bosch service agent.
- (c) Invoices for attendance and repair of a hot water unit by third parties not authorised by Bosch will not be accepted for payment by Bosch.

6. Privacy Act 1988 (Cth)

A customer's personal information collected during warranty claims may be used for the provision of customer support, for the provision of information about products and services and for other marketing activities undertaken by Bosch and its Bosch Service Agents who are authorised to carry out warranty repairs on behalf of Bosch (**Purpose**). Bosch is committed to protecting the privacy of its customers' personal information. It will act in compliance with the National Privacy Principles and *Privacy Act 1988* (Cth). Bosch will not forward customers' personal information to third parties other than for the Purpose. A customer can object at any time to the use of their personal information for the Purpose. Bosch will cease to use a customer's personal information accordingly if an objection is made.

7. Bosch contact details

If you have any questions about this warranty or to lodge a warranty claim, please contact:

Robert Bosch (Australia) Pty Ltd
1555 Centre Road, Clayton, Victoria 3168
Tel: Australia: 1300 307 037
Tel: New Zealand: 0800 543 352

IMPORTANT NOTE FOR AUSTRALIAN CONSUMERS

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.