Installation Instructions





Rheem Continuous Flow Gas Water Heaters



This EZ-Link system must be installed and serviced by a qualified person. Please leave this guide with the householder

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UNIT IDENTIFICATION

Model numbers referred to in this document are the last three <u>numbers</u> of the full model number, ignoring the letters. E.g. 874627NFZ referred to as 627

The first of these three digits designate the star rating of the unit. Six star - number 6 and older five star unit - number 0

The table on page 3 indicates compatibility and wether a controller is required as part of the installation

It is important to ensure you know which units are being connected via EZ-link to ensure correct operation.

EZ-Link Compatibility

The EZ-Link[™] system is designed to electronically control two continuous flow gas water heaters and have them operate as one. One or both water heaters may be in operation, depending upon the hot water demand. The second water heater will only operate when the hot water demand exceeds the capacity of the first water heater to supply.

EZ-Link Compatibility		
Integrity CFWH External Model Number	EZ link Compatible	Controller Required
874616NFZ	YES	NO
874616LFZ	YES	NO
874620NFZ	YES	NO
874620LFZ	YES	NO
871624NFZ	NO	
871624LFZ	NO	
874627NFZ	YES	NO
874627LPZ	YES	NO
884024NFZ (Condensing)	YES	YES MUST be Deluxe
884024LFZ (Condensing)	YES	YES MUST be Deluxe
872627NFZ (82º Commercial)	YES	NO
872627LPZ (82° Commercial)	YES	NO
Integrity CFWH Internal Model Number	EZ link Compatible	Controller Required
864627NFZ	YES	NO
864627LFZ	YES	NO
862627NFZ (82º Commercial)	YES	NO
862627LPZ (82º Commercial)	YES	NO

Notes:

- All 6 star units do not require a controller
- Older 5 star units require at least one controller
- Two units maximum can be linked via EZ-link
- Both units must be the same model. The performance of two different model water heaters manifolded together cannot be guaranteed.
- EZ link will vary the start-up sequence of the two units
- Controllers can be standard or deluxe models (Except 884) (Kitchen 55° - Bathroom 50° Max)
- Controllers must be of the same family



Ez-Link Kit – Product Code 290141

If the Ez-Link system is used with a controller on a model capable of achieving a pre-set outlet temperature greater than 60°C, the maximum outlet temperature will be limited by the maximum temperature setting of the controller.

Warning: Two continuous flow water heaters manifolded together with an Ez-Link system installed cannot be used as an in-series gas booster system to a solar water heater installation if a temperature controller is installed. Temperature controllers **must not** be fitted to a water heater as part of a solar water heater system because water at a temperature much higher than the controller setting can be delivered.

Dual Installation

The two continuous flow water heaters can be installed side by side with minimal clearance between them. The AGA has approved the installation of two water heaters with an exemption from the 300 mm minimum clearance requirements between flue terminals, as stated in AS/NZS 5601, clause 5.13.6.5 and AS/NZS 5601.1, clause 6.9.3.

Install two continuous flow water heaters of the same model in a parallel plumbing arrangement. It is good practice, but not essential, to install the two water heaters in an Equa-Flow[®] plumbing arrangement. The installation must be in accordance with the Owner's Guide and Installation Instructions supplied with the water heater.

Installation Notes:

- 1. The pipe work must be sized to meet the requirements of both AS/NZS 3500.4 and the application. It is recommended to use minimum DN25 pipe for the cold water line, cold and hot headers and hot water line and DN20 for the cold and hot water branch lines of each water heater.
- 2. A full flow gate valve or ball valve must be installed on the cold water line to the system. A non-return valve or stop tap must not be installed.
- 3. A full flow gate valve or ball valve (not a stop tap) should be installed on both the cold water branch and hot water branch of each water heater.
- 4. An isolation valve must be installed on the gas branch of each water heater.
- 5. Non return valves or pressure limiting valves must not be installed on the branch lines to the water heaters.
- 6. All fittings, valves and branch lines should be matched sets to each of the water heaters.
- 7. Sufficient space must be left to enable access, servicing or removal of either water heater.

Please refer to the "Typical Two Unit Manifold with Ez-Link Connection" diagrams on pages 11 to 13.

Labels

A warning label (121109) and an AGA approval label (121901) are supplied in the Ez-Link kit. Where the two water heaters are installed close together and the warning label and AGA approval label on the inside face of the right hand water heater cannot be read, it is necessary to adhere the two labels supplied to the right-hand face of the water heater.

- 1. Place the warning label below the rating label.
- 2. Place the AGA approval label beside the barcode label.

Refer to the "Label Positioning" opposite for the position of the two labels to be adhered to the water heater.

A second rating label is attached to the inside of the front cover. This can be referenced to determine details of the left hand water heater.



Temperature Controller

A temperature controller is optional for 6 star units but <u>MUST</u> be installed with the EZ-Link system connected to 884 model water heaters or older 5 star units. Deluxe controller(s) <u>MUST</u> be used for 884 models but all others can be either a standard or deluxe controller(s). If a temperature controller is not installed on 884 or older 5 star models neither water heater will operate.

Connect the temperature controller(s) to only one of the two water heaters. Up to three temperature controllers of the same family can be installed to this water heater. Refer to "Installation – Controllers" in the Owner's Guide and Installation Instructions supplied with the water heater, for the rules applying to the installation of temperature controllers and for details on connecting a controller to the water heater.

The water heater connected with the temperature controller(s) will become the "master" water heater. The installed temperature controller(s) will control the temperature and functionality of both water heaters.

The maximum outlet temperature of the water heaters will be limited by the maximum temperature setting of the temperature controller (Kitchen 55°C, Bathroom 50°C)

Notes:

The pre-set outlet temperature setting of the water heaters must be set to at least 60°C if installed as part of a circulated hot water flow and return system in a building.

Water should not be circulated from a water heater with a temperature setting of less than 60°C.

Refer to the Owner's Guide and Installation Instructions supplied with the water heater for further information on installing a water heater as part of a circulated hot water flow and return system in a building.

Warning: Two continuous flow water heaters manifolded together with an Ez-Link system installed cannot be used as an inline gas booster system to a solar water heater installation if a temperature controller is installed. Temperature controllers **must not** be fitted to a water heater as part of a solar water heater system because water at a temperature much higher than the controller setting can be delivered.

Ez-Link Cable Connection

To connect the Ez-Link cable to the water heaters:

- 1. Close any hot taps and ensure the burners on both water heaters are not operating.
- 2. Switch off the electrical supply at the power outlet to each water heater.
- 3. Remove the screws holding the front panel to the jacket on each water heater.
- 4. Gently disengage the front panel and pull forward to remove from each water heater.

The following pages show details of cable connection and DIP switch settings for each model of water heater compatible with EZ-link. The EZ-link system is not gas type specific so the process is the same for both NAT and LPG versions of the same model.

Models 016, 616, 020, 620

- 1. Connect one end of the EZ-Link cable to the first water heater.
 - Draw the cable through the cable grommet on the underside of the water heater.
 - Plug the cable into the four pin connector marked "E" in the upper right-hand corner of the Control Board. The connector will only fit one way.
 - Press until the connector snaps into place.
 - Secure the EZ-Link cable with the clamp and screw provided, to the bottom right of the Control Board.
- 2. *With or Without a Controller Connected:* Switch DIP SWITCH 4 to the on (up) position on the first water heater.

Note: If a controller is connected to one of the water heaters, then this is the "first" water heater.

- 3. *Without a Controller Connected:* If a temperature controller is not installed then also switch DIP SWITCH 3 to the on (up) position on the first water heater.
- 4. Connect the other end of the EZ-Link cable to the second water heater.
 - Draw the cable through the cable grommet on the underside of the water heater.
 - Plug the cable into the four pin connector marked "E" in the upper right-hand corner of the Control Board. The connector will only fit one way.
 - Press until the connector snaps into place.
 - Secure the EZ-Link cable with the clamp and screw provided, to the bottom right of the Control Board.
- 5. *With or Without a Controller Connected:* Switch DIP SWITCH 4 to the on (up) position on the second water heater.

Models 016, 616, 020, 620



Water Heater no.1 (With controller(s) connected)



Water Heater no.2

Dip switch settings with a temperature controller connected



Dip switch settings without a temperature controller

- 6. Refit the front panel and screws to each water heater.
- 7. Check the isolation valves at the gas inlet to each water heater are fully open.
- 8. Switch on the electrical supply at the power outlet to each water heater.
- 9. Turn on the controller by pressing the on/off button, if one is installed.
- 10. Open a hot tap. The first water heater and depending upon the flow from the hot tap, the second water heater will operate automatically.
- 11. Increase the hot water flow by turning on an additional hot tap(s).

Check to ensure the flow from each connected hot tap is sufficient to operate both water heaters. The minimum operating flow rate for each water heater is 2.5 litres per minute.

12. Turn off the hot taps.

Refer to the "Commissioning" section in the Owner's Guide and Installation Instructions supplied with the water heater for details on completing the installation.



Models 024 condensing, 027, 627

- 1. Connect one end of the EZ-Link cable to the first water heater.
 - Draw the cable through the cable grommet on the underside of the water heater.
 - Plug the cable into the four pin connector located immediately below the MIN button, toward the upper right hand corner of the Control Board. The connector will only fit one way.
 - Press until the connector snaps into place.
- 2. Secure the EZ-Link cable with the clamp and screw provided to the top right of the Control Board.
- 3. With or Without a Controller Connected: Switch DIP SWITCH 4 to the on (up) position on the first water heater.

Note: If a controller is connected to one of the water heaters, then this is the "first" water heater.

- 4. *Without a Controller Connected:* If a temperature controller is not installed on the 627 models, then also switch DIP SWITCH 1 of the DIP 2 set of dip switches to the on (up) position on the first water heater.
- 5. Connect the other end of the EZ-Link cable to the second water heater.
 - Draw the cable through the cable grommet on the underside of the water heater.
 - Plug the cable into the four pin connector located immediately below the MIN button, toward the upper right hand corner of the Control Board. Press until the connector snaps into place.
 - Secure the EZ-Link cable with the clamp and screw provided, to the bottom right of the Control Board.
- 6. *With or Without a Controller Connected:* Switch DIP SWITCH 4, on the DIP 1 set of dip switches, to the on (up) position on the second water heater.



Models 024 condensing, 027, 627

Dip switch settings with a temperature controller connected



Dip switch settings without a temperature controller

- 7. Refit the front panel and screws to each water heater.
- 8. Check the main gas isolation valve and the isolation valves at the gas inlet to each water heater are fully open.
- 9. Switch on the electrical supply at the power outlet to the water heater.
- 10. Turn on the controller by pressing the on / off button, if one is installed.
- 11. Open a hot tap.

The first water heater and depending upon the flow from the hot tap, the second water heater will operate automatically.

12. Increase the hot water flow by turning on an additional hot tap(s).

Check to ensure the flow from each connected hot tap is sufficient to operate both water heaters. The minimum operating flow rate is 2.0 litres per minute.

13. Turn off the hot taps.





Typical Two Unit Manifold with Ez-Link Connection

Typical Two Unit Manifold with Ez-Link Connection Outdoor 016, 616, 020, 620 models

Refer to the Owner's Guide and Installation Instructions supplied with the water heater for additional information on the installation of the water heaters.



Typical Two Unit Manifold with Ez-Link Connection

Outdoor 027, 627 and 024 condensing models

Refer to the Owner's Guide and Installation Instructions supplied with the water heater for additional information on the installation of the water heaters.



Typical Two Unit Manifold with Ez-Link Connection Indoor 027 and 627 Models

Refer to the Owner's Guide and Installation Instructions supplied with the water heater for additional information on the installation of the water heaters.

Warning: Upon completion of the installation and commissioning of the water heater, leave this guide with the householder or a responsible officer. <u>DO NOT</u> leave this guide inside of the cover of the water heater, as it may interfere with the safe operation of the water heater or ignite when the water heater is turned on.

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PATENTS

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