

iHeat installation overview (RAHU20)

(Combined water and central heating system)

Important



In order to validate the warranty the Rinnai iHeat must be installed by trained tradespeople who have completed the Rinnai iHeat online specifying and installation courses.

Plumbing connections must be made by a licensed plumber who has completed the Rinnai iHeat installation course.

Access to the iHeat online courses are available from the Rinnai homepage, www.rinnai.co.nz.

This installation overview has been prepared based on the assumption that the online training has been completed.

This appliance shall be installed in accordance with:

- Information provided by the manufacturer's online training course
- AS/NZS 5601 Gas Installations
- AS/NZS 3000 Wiring Rules
- Local regulations and municipal building codes

Installation, servicing and repair shall be carried out by authorised personnel.

Warning

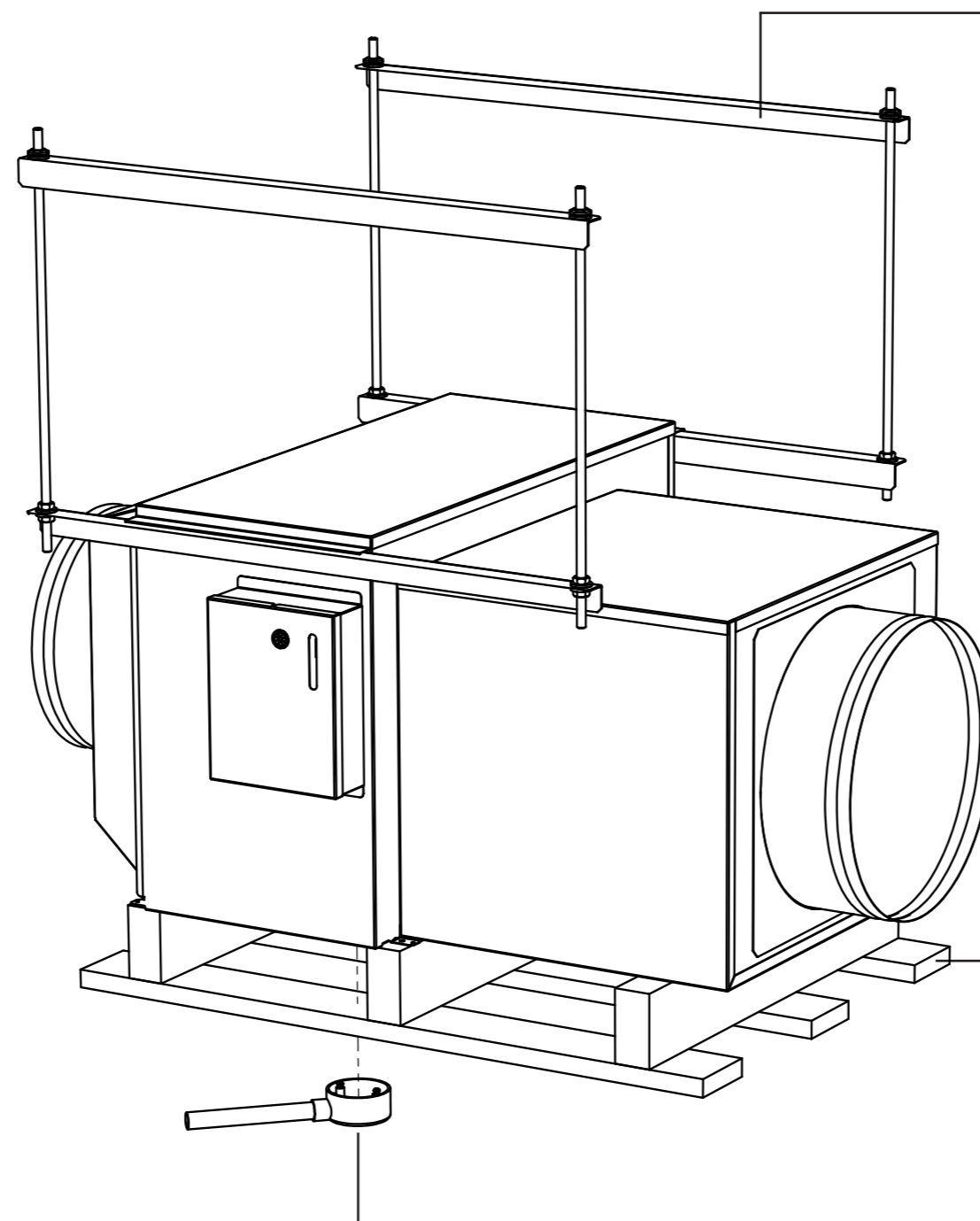


Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury or loss of life.

Contact



If you have any questions about this installation overview, or need additional information, contact 0800 TO RINNAI (0800 86 746 624)



Suspended mounting

Use suspended mounting kit R5044 to suspend iHeat from roof trusses or floor joists.

[To view a short refresher video on suspended mounting](https://rinnai.co.nz/008)

<https://rinnai.co.nz/008>

Clearances

Position the iHeat so that the LED's are easily visible through the window of the control board. Avoid positions that make access to the iHeat and removing components difficult.

Minimum clearances:

- Above unit: 450 mm minimum
- Sides of unit: 750 mm minimum
- Front and behind unit: 1 m minimum

Where the appliance has not been sited in accordance with these clearances, or installed such that normal service access is difficult, a service charge for warranty work may apply.

Base mounting

Secure pallet to roof trusses within the ceiling space.

[To view a short refresher video on base mounting](https://rinnai.co.nz/009)

<https://rinnai.co.nz/009>

Drain line

20 mm fall per metre. Must be visible to the homeowner so they can easily establish if they have a leak.

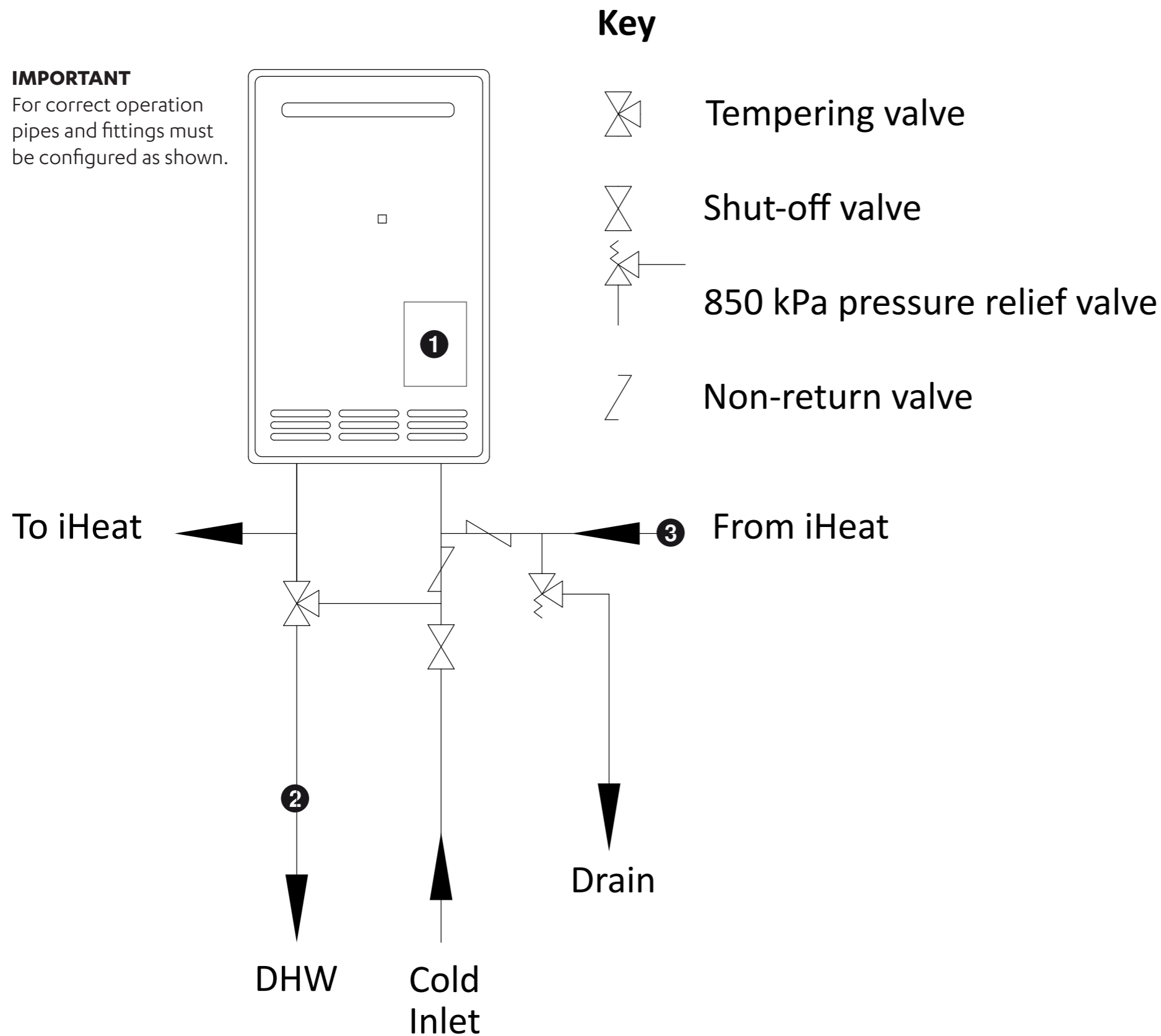
[To view a short refresher video on the drain line requirements](https://rinnai.co.nz/010)

<https://rinnai.co.nz/010>

Rinnai Infinity iHeat interface

IMPORTANT

For correct operation pipes and fittings must be configured as shown.



1 Rinnai INFINITY dip switch settings

The iHeat's power output of 20 kW is obtained when using a water temperature of 75 °C. This is the maximum water temperature that can be used in an iHeat installation. Lower water temperatures may be used, if required, with a subsequent reduction in power. To change the Rinnai Infinity dip switch settings, refer to the Rinnai INFINITY continuous water heater installation manual. If this is a retrofit installation, with an existing Rinnai Infinity unit, please contact Rinnai (0800 TO RINNAI) 0800 86 746 624.

Rinnai Infinity dip switch setting	Fan speed setting on iHeat (dip switches 1 and 2)			
	OFF/OFF	OFF/ON	ON/OFF	ON/ON
60 °C	13	11	15	17
65 °C	14	12	16	18
75 °C	16	14	18	20

The kW output is the approximate kW power output under rated conditions

DHW (domestic hot water) plumbing interface to the iHeat

2 The Rinnai INFINITY plumbing needs to be modified to add a tempering valve and provide the take-off and return points to provide the extra hot water circuit required to run the iHeat.

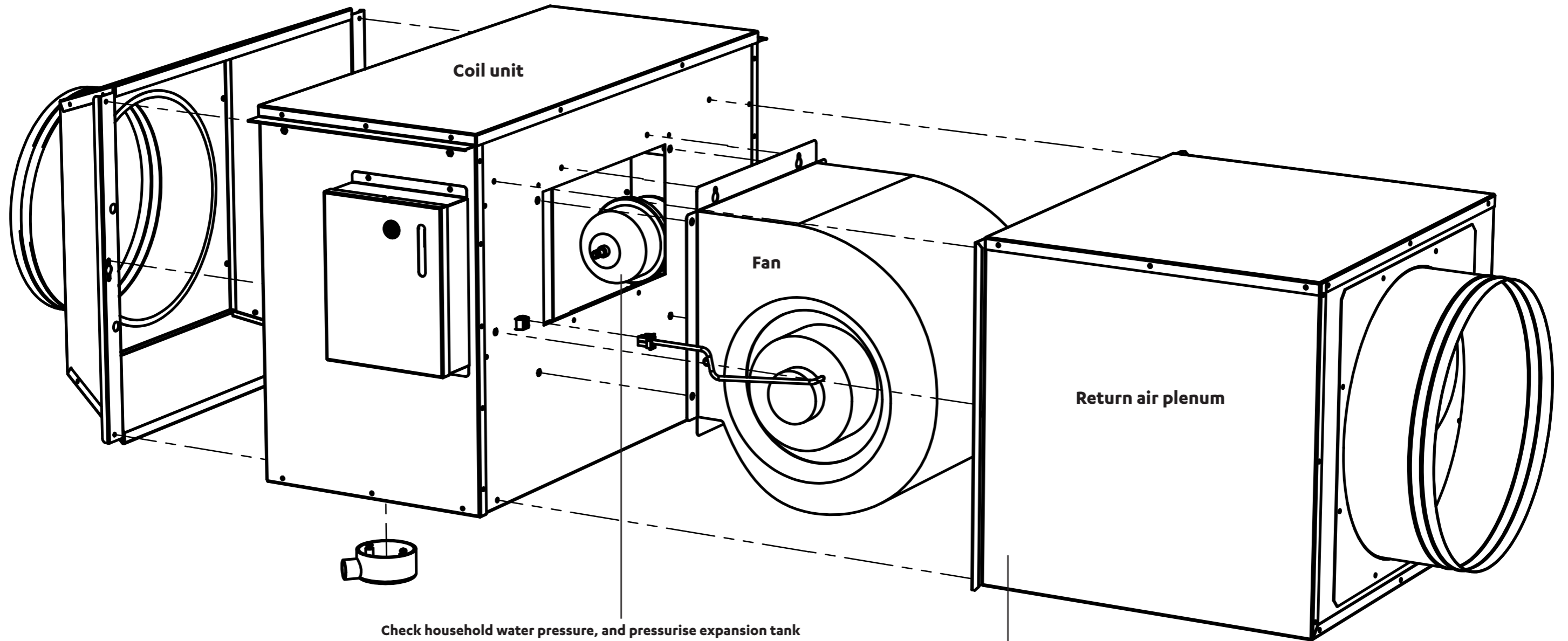
[To view a short refresher video on Rinnai INFINITY to iHeat plumbing](https://rinnai.co.nz/011)
<https://rinnai.co.nz/011>

Connecting pipes

3 Minimise pipe length and tight bends that restrict water flow. Lag pipes to reduce heat loss.

[To view a short refresher video on running the pipes between the Rinnai INFINITY and iHeat](https://rinnai.co.nz/012)
<https://rinnai.co.nz/012>

Unpacking and assembly



Check household water pressure, and pressurise expansion tank

Before pressurising the expansion tank you need to measure the static pressure of the cold water supply to the property. Water pressure must be limited to 500 kPa.

Pressurise expansion tank to 1.1 times the static household water pressure.

[To view a short refresher video on checking the cold water supply and pressurising the expansion tank](https://rinnai.co.nz/013)

<https://rinnai.co.nz/013>

Unpacking and assembly

1. Remove return air plenum and fan modules.
2. Unfasten coil unit from pallet.
3. Pressurise expansion chamber.
4. Reassemble components at the installed location.

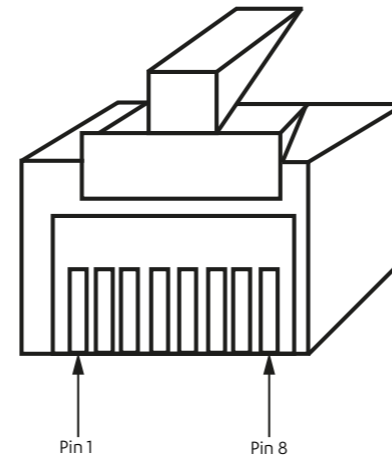
[To view a short refresher video on how to disassemble](https://rinnai.co.nz/014)

<https://rinnai.co.nz/014>

Cat 5 cable and RJ45 connection guidelines

Thermostat RJ45 connection (C8)

Pin	Description	Rinnai thermostat connection
1	24 VAC power supply for thermostat	R & RC
2	Common	C
3	Pump operation	Y
4	Fan Lo	G
5	Fan Med	G2
6	Fan Hi	G3
7	Not used	No connection
8	Not used	No connection



Operation test connection (C1)

Pin	Label	Operation
1-3	R-HC	Pump run
1-4	R-M1	Pump fan low
1-5	R-M2	Run fan medium
1-6	R-M3	Run fan high

Thermostat - iHeat connecting cable terminations

If the thermostat and Rinnai iHeat PCB ends are held side by side the wire termination should be the same in each.

