# Rinnai

PURPOSE: To announce recent product updates to the Rinnai I-Series Condensing Boilers.

#### **PRODUCT INFORMATION**

- Applicable Product:
- Rinnai I-Series Condensing Boilers
- Applicable Models:

Combi Models		
•		(REB-A1847FF-US) (REB-A2647FF-US)
•	i120C	(REB-A3558FF-US)

 Solo Models

 i060S (REB-A1800FF-US)

 i090S (REB-A2600FF-US)

 i120S (REB-A3500FF-US)

 i150S (REB-A4400FF-US)

• I-Series Manuals Referenced in this Document (English and French Versions):

Table 1. Manuals Referenced in Document

Manual #	Revision #	Manual Title	
800000111	01	I-Series Boiler Installation and Operation Manual (Combi)	
800000112	01	I-Series Boiler Installation and Operation Manual (Solo)	
800000114	01	I-Series Boiler User Manual (Combi)	
800000140	01	-Series Boiler User Manual (Solo)	
800000113	03	I-Series Boiler Conversion Manual (Combi and Solo) (English and French are combined into the same manual)	

- The manuals referenced in Table 1 above are located on rinnai.us.
- Manual and revision numbers are the same for English and French manuals, except French manuals contain "-Fr" at the end of the manual number. For example:

English manual:	800000111(01)
French manual:	800000111(01)-Fr

 The manual and revision numbers are located on the last page of the manual in the bottom, right corner (Fig 1).

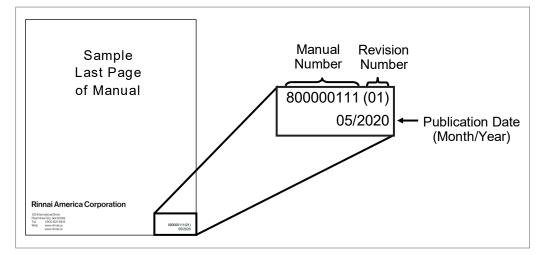


Fig 1. Manual and Revision Numbers on Last Page of Manual

#### DETAILS

Rinnai recently launched new product updates to the Rinnai I-Series Condensing Boilers. Listed below are some of the new product features and enhancements.

**Note:** The following acronyms are commonly used throughout this document: CH = Central Heating; DHW = Domestic Hot Water.

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#### Minimum Temperature Changes

Description:	The following temperatures have been lowered from 104°F (40°C) to 86°F (30°C):
	<ul> <li>Minimum Central Heating (CH) operation temperature (temperature was lowered to reduce the need of additional mixing valves for low temperature heat emitter systems).</li> <li>Minimum temperature of Outdoor Reset Curve 4 in Parameter 01 (Fig 2).</li> </ul>
Model(s):	Combi and Solo
Manual Reference: For more information on Outdoor Reset Curve refer to section "12.5.4 Outdoor Reset Curve the "I-Series Boiler Installation and Operation Manual" (Combi and Solo versions).	

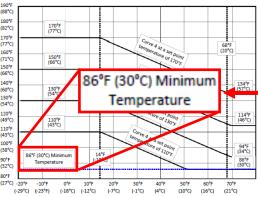


Fig 2. Minimum Temperature on Outdoor Reset Curve 4 as shown in the "I-Series Combi Boiler Installation and Operation Manual"

#### 2 CH Setpoint Temperature Parameter Selection

Description:	To adjust the CH setpoint temperature, Parameter 01 must be set to "d" (Curve 4) (Table 2).
Model(s):	Combi and Solo
Manual	For more information on the CH setpoint temperature:
Reference:	• Combi models: Refer to section "12.3.2 Central Heating Setpoint Temperature" in the "I-Series Combi Boiler Installation and Operation Manual."
	• Solo models: Refer to section "12.3.1 Central Heating Setpoint Temperature" in the "I-Series Solo Boiler Installation and Operation Manual."

Table 2. Parameter 01 (Outdoor Reset Curve) as shown in the "I-Series Boiler Installation and Operation Manual" (Combi and Solo versions).

Parameter	Catting Decembration	Selection			
Number	Setting Description	Α	b	С	d
	Outdoor Reset Curve				
וס	This parameter is available when Dip Switch 1 is in the OFF (default) position. Select the proper curve from below. See section "12.5 Outdoor Reset Control" for more information. <b>Curve 1:</b> Standard baseboard, high efficiency air handler, cast iron or panel radiators. <b>Curve 2:</b> Staple up radiant. <b>Curve 3:</b> High temperature air handler or undersized baseboard. <b>Curve 4:</b> Custom curve based on customer input.	Curve 1	Curve 2	Curve 3	Curve 4

#### **3** Greater Domestic Hot Water (DHW) Allowed in Simultaneous CH/DHW Operation

Description:	The boiler has been adjusted to allow a greater maximum DHW draw while operating simultaneously between CH and DHW.
Model(s):	Combi
Manual Reference:	For more information, refer to section "12.7 Simultaneous CH and DHW Operation" in the "I-Series Combi Boiler Installation and Operation Manual."

## 4 DHW Time Limit

Description:	A new parameter setting, Parameter 18 (DHW Continuous Operation Time), has been implemented to prevent the building/house from unnecessarily cooling due to a potentially long uncontrolled DHW demand. Parameter 18 can be set to 60 minutes, 120 minutes, 180 minutes, or unlimited (Table 3).
Model(s):	Combi
Manual Reference:	For more information on Parameter 18, refer to section "12.4.1 Parameter Settings Table" in the "I-Series Combi Boiler Installation and Operation Manual."

Table 3. Parameter 18 as shown in the "I-Series Combi Boiler Installation and Operation Manual."

Parameter	Comine Description	Selection			
Number	Setting Description	Α	b	С	d
	DHW Continuous Operation Time				
	This setting adjusts the maximum continuous operating time of DHW, whether in DHW priority or simultaneous modes.	120 Minutes	60 Minutes	180 Minutes	Unlimited

## **5** Diagnostic Code 021

Description:	A new diagnostic code, 021 (Continuous DHW), will display when DHW is in continuous operation for extended periods of time (Fig 3).
Model(s):	Combi
Manual Reference:	For more information on diagnostic code 021, refer to section "12.8 Diagnostic Codes" in the "I-Series Combi Boiler Installation and Operation Manual."

## Continuous DHW

This code will display when DHW is in continuous operation for extended periods of time.

Ensure there are no open faucets.
Ensure there are no leaks in fixtures or the plumbing system.

Fig 3. Diagnostic Code 021 as shown in the "I-Series Combi Boiler Installation and Operation Manual"

#### 6 Ubbink Rolux® Flexible Venting

Description:	The following Ubbink Rolux® flexible venting is approved for vertical, non-direct vent (room air) applications: 2 in. (60 mm) Polypropylene (PP) (Fig 4).
Model(s):	Combi and Solo
Manual Reference:	For more information on Ubbink Rolux® flexible venting, refer to section "5.5.5 Non-Direct Vent (Room Air)" in the "I-Series Boiler Installation and Operation Manual" (Combi and Solo versions).

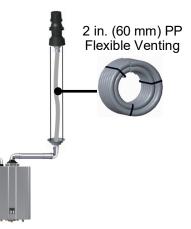


Fig 4. Ubbink Rolux® Flexible Venting

## Combustion Test Port

Description:	A combustion test port (Fig 5) is now available inside the boiler cabinet on the air box and enables the technician to perform a combustion analysis of the boiler.
Model(s):	Combi and Solo
Manual Reference:	For more information on the combustion test port and combustion analysis:
	Combi models: Refer to section "14.5.5 Perform Combustion Analysis" in the "I-Series Combi Boiler Installation and Operation Manual."
	• Solo models: Refer to section "14.4.5 Perform Combustion Analysis" in the "I-Series Solo Boiler Installation and Operation Manual."

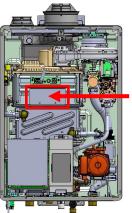


Combustion Test Port

Fig 5. Combustion Test Port on Combi Boiler (Location is the Same on Solo Boilers)

## 8 Canadian Registration Number (CRN)

Description:	The CRN is a number issued by each province or territory of Canada to the design of pressure vessels, piping systems or fittings. The CRN identifies the design is accepted and registered for use in that province or territory. The I-Series Condensing Boiler CRN is stamped on the heat exchanger data plate (Fig 6).
Model(s):	Combi and Solo
Manual Reference:	The boiler CRN is listed in section "3.4 Specifications" of the "I-Series Boiler Installation and Operation Manual" (Combi and Solo versions).



CRN is stamped on the heat exchanger data plate.

Fig 6. Heat Exchanger Data Plate on Combi Boiler (Location is the Same on Solo Boilers)

## **9** Updated Pump Terminals

Description:	PC Board has been updated to allow for better operation of Electronically Communicated Motor (ECM) pumps (Fig 7).
Model(s):	Combi and Solo
Manual Reference:	Not Applicable



Fig 7. Sample ECM Pump by Grundfos

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