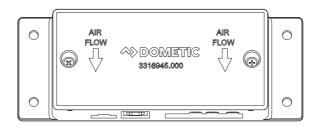
# ↑> DOMETIC CLIMATE CONTROL CONTROL MODULE



3316945.000

EN RV-C Gateway
Installation

# **NORTH AMERICAN ADDRESS INFORMATION**

### **USA & CANADA**

### **Service Center & Dealer Locations**

Service Office Dometic Corporation 1120 North Main Street Elkhart, IN 46514

Visit: www.dometic.com

### **Revision A**

Form No. 3316990.000 3/18 | ©2018 Dometic Corporation



Read these instructions carefully.

### **CONTENTS**

1	Explanation of symbols and safety instructions	. 3
2	General information	. 4
3	Intended use	. 5
4	Specifications	. 5
5	Prepare for installation	. 5
6	Installation	9

### **EXPLANATION OF SYMBOLS AND SAFETY INSTRUCTIONS**

This manual has safety information and instructions to help you eliminate or reduce the risk of accidents and injuries. Dometic Corporation accepts no liability for damage in the following cases:

- Faulty assembly or connection.
- $\bullet\,$  Damage to the product resulting from mechanical influences and excess voltage.
- Alterations to the product without expressed permission from the manufacturer.
- Use for purposes other than those described in the operating manual.

### 1.1 **Recognize Safety Information**



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

### **Understand Signal Words**

A signal word will identify safety messages and property damage messages, and will indicate the degree or a signal word will be a signallevel of hazard seriousness.

**AWARNING** indicates a hazardous situation that, if **not** avoided, could result in death or serious injury.

**ACAUTION** indicates a hazardous situation that, if **not** avoided, could result in minor or moderate

**NOTICE** is used to address practices **not** related to physical injury.



indicates additional information that is **not** related to physical injury.

### 1.3 **Supplemental Directives**



Read and follow all safety information and instructions to avoid possible injury or death. Read and understand these instructions before installation of this product. Incorrect installation of this product can lead to serious injury.

The installation must comply with all applicable local or national codes, including the latest edition of the following standards:

### U.S.A.

- ANSI/NFPA70, National Electrical Code (NEC)
- ANSI/NFPA 1192, Recreational Vehicles Code

### Canada

- CSA C22.1, Parts I & II, Canadian Electrical Code
- CSA Z240 RV Series, Recreational Vehicles

### 1.4 FCC and IC regulations

This device complies with Part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

### 1.5 General Safety Messages

**AWARNING** Failure to obey the following warnings could result in death or serious injury:

- This product must be installed by a qualified service technician.
- Do **not** modify the product beyond the scope of these instructions. Modification can be extremely hazardous.
- Do not add any devices or accessories to this product except those specifically authorized in writing by Dometic Corporation.
- Air conditioners are normally located on the roof of an RV. It is inherently dangerous to climb onto the
  roof of an RV to perform maintenance on an air conditioning unit. Falling from the roof of an RV, or while
  climbing onto the roof, can cause serious injury or death. Air conditioner maintenance/repairs are best
  performed by a qualified, certified RV technician.

**NOTICE** Disconnect the negative (-) 12 VDC terminal from the supply battery. Failure to obey this notice could result in damage to the unit.

### **2 GENERAL INFORMATION**

Included Parts	
12VDC 3-pin Connector Pigtail	
Mounting Hardware	
Remote Temperature Sensor	

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# **Recommended Tools** #2 Phillips Screwdriver Wire Crimpers Wire Strippers



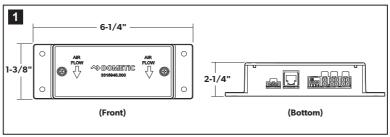
Read before proceeding:

- $\bullet \ \, \text{The remote temperature sensor is installed according to the specifications of each model of recreational} \\$ vehicle (RV). The wire is routed to the Gateway through the air return with the rest of the wiring. Refer to "6.1 Wiring the RV-C Gateway" on page 8.
- $\bullet\,$  One RV-C Gateway may be installed for each air conditioner unit: up to four per RV.
- If the RV-C Gateway is intended for installation in the air return, consult a Dometic Applications Engineer for specific instructions.

### **INTENDED USE**

The RV-C Gateway is designed and intended for use only in the RV for which it is supplied. Use the instructions to ensure correct installation of the RV-C Gateway. Dometic Corporation reserves the right to modify appearances and specifications without notice.

### 4 **SPECIFICATIONS**





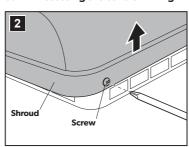
 $\label{thm:compatible} The \ RV-C \ Gateway \ is \ compatible \ with \ any \ CT \ thermost at-compatible \ air \ conditioner \ control, \ except$ models equipped with a heat strip. To be used with Fantastic Vent models with wall controlled fan.

### PREPARE FOR INSTALLATION

**AWARNING** ELECTRIC SHOCK HAZARD. Disconnect 120 VAC power from the RV. Failure to obey this warning could result in death, or serious injury.

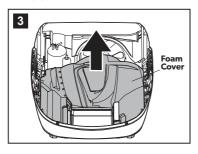
**NOTICE** Disconnect the negative (-) 12 VDC terminal from the supply battery. Failure to obey this notice could result in damage to the unit.

# 5.1 Accessing the control wiring

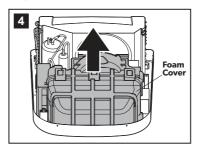


➤ Remove the air conditioner shroud by removing the screws securing it in place.

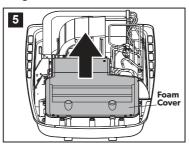
# Blizzard NXT



### Brisk II



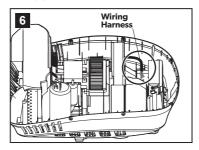
# Penguin II



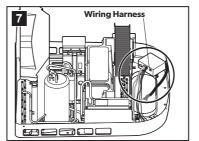
➤ Remove the foam cover to expose the evaporator coil and control board wiring.

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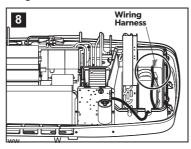
### Blizzard NXT



### Brisk II



### Penguin II



- $\blacktriangleright$  Locate the four-wire harness connected to the air conditioner unit control box.
- $\blacktriangleright$  Identify the (+) 12 VDC to the thermostat, (-) 12 VDC from the supply, and COM wires. Refer to "6.1 Wiring the RV-C Gateway" on page 8.

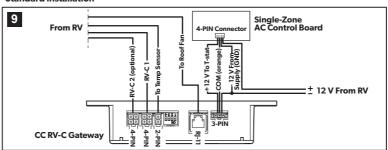


Air conditioner units with built-in control boxes will not have an additional control box. The four-wire harness is located inside the sheathing coming from the main control box.

# **6 INSTALLATION**

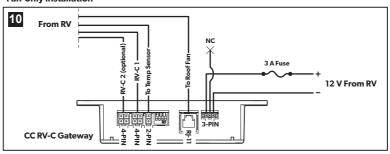
### 6.1 Wiring the RV-C Gateway

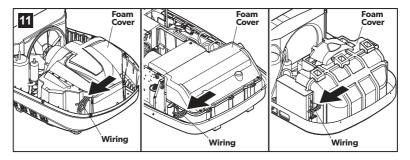
### Standard installation



### Fan-only installation

EN

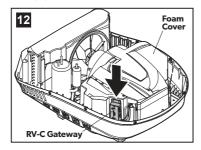




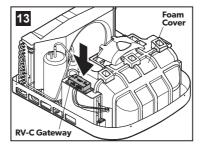
- ightharpoonup Cut the (+) 12 VDC to the thermostat, (-) 12 VDC from the supply, and COM wires; route them through the hole in the foam cover to the RV-C Gateway mounting location.
- ➤ Route the remote temperature sensor wire, roof fan wire, and RV-C cables through the hole in the foam cover to the RV-C Gateway mounting location.
- ➤ Re-install the foam cover.
- ➤ Using the appropriate crimp connectors, connect the leads from the three-pin pigtail to the air conditioner control wires.

Connection	Wire Description (Gateway)	Wire Description (A/C control board)
1	Red	Label: (+) 12 VDC to the thermostat
2	Green	Color: Orange
3	Black	Label: (-) 12 VDC from supply to Tstat

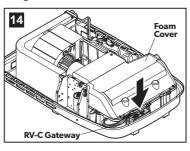
# 6.2 Mounting the RV-C Gateway Blizzard NXT



### Brisk II



### Penguin II



- $\blacktriangleright$ Remove the protective film from the two strips of foam mounting tape on the back of the RV-C Gateway.
- $\blacktriangleright$  Press the RV-C Gateway firmly onto the appropriate mounting location.

### 6.3 Connecting the RV-C Gateway

- ➤Connect the wiring to the appropriate ports on the Gateway. Refer to "6.1 Wiring the RV-C Gateway" on page 8.
- Assign a zone to the RV-C Gateway using the DIP switches located on the back of the Gateway. Assign a different zone for each Gateway.