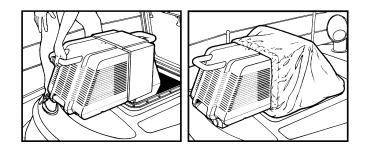
English

IMPORTANT: MAXIMUM COOLING CAPACITY

This Carry-On air conditioner is designed to cool a space of approximately 90 square feet (Carry-On 5000) to 120 square feet (Carry-On 7000). This is "below decks space." This means that there are no large windows, typical of powerboats, and the unit will cool a "space/cabin" or a boat with the above dimensions. If you have any questions, please call our customer service line at 888-452-0349 (Ocean Marketing).

If this unit was purchased from a catalog or a chain store please call Ocean Marketing at the following number for all service or return issues. 888-452-0349



U.S. Patent Numbers: D309941; 4,967,569



Portable Air Conditioners For 115V and 220V Units (7000 and 7020 Models)

Revised: 4-4-05 L-2245

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Carry-On 7000 Portable Air Conditioners • Introduction

You have purchased a marine air conditioner that will add to your boating enjoyment. Please read the accompanying instructions to insure proper installation, operation and care.

Warnings

The use of the Carry-On[™] is not recommended while the boat is under way because of the potential for damage to the Carry-On or the boat or the potential for personal injury.

The National Electrical Code recommends the use of a cord labeled with LCDI or AFCI when connecting a room air conditioner to power. LCDI stands for Leakage Current Detection and Interruption; AFCI stands for Arc Fault Circuit Interruption. Both help prevent fires and electrical shock. Dometic recommends that you contact your dealer and request part LCDI25 (25' cord) or purchase a similar cord from another supplier.

The Carry-On unit weighs 77 lbs (34.9 kg). Please get assistance when moving or lifting the Carry-On to prevent injury.

Dimensions & Hatch Size

The Carry-On is 19" (483mm) High, but only 14 5/8" (371mm) above deck when installed. The unit is 33" (838mm) Long and 16" (406mm) Wide. For proper installation, the minimum hatch size is 12" (305mm) square, and the maximum hatch size is 24" (610mm) square. The minimum round hatch diameter is 15 1/2" (394mm).

Important Information

Please make sure you have the following items. If you are missing any of these items please contact your dealer.

- (1) CO-7000 Carry-On Portable Air Conditioning Unit
- (1) Hatch Bag
- (1) Air Deflector
- (2) 23" Batten Rods
- (2) 25-1/2" Batten Rods

Before installing the unit you will need:

A power extension cord rated at 15 amps for 115V unit or 10 amps for a 220V unit. (See section, *"Safe Operation of Carry-On"*)

Optional 3/8" I.D. (Inside Diameter) Flexible drain tubing (See section, "Installation Instructions")

Power Requirements

For 115 Volt Units (50/60Hz Operation)

115/60/1 dockside power Running amps: 6.9 A Starting amps: 21 A Minimum Voltage: 104 VAC Minimum Circuit: 15 A

For 220 Volt Units (50Hz Operation Only)

220/50/1 dockside power Running Amps: 3.4 A Starting Amps: 10 A Minimum Voltage: 198 VAC Minimum Circuit: 10 A

Inverter/Generator Operation

In order to use the Carry-On safely on inverter or generator power, you must confirm that the inverter/generator will be able to meet the power requirements listed in this manual. Dometic cannot assist in sizing an inverter/generator as the manufacturer of that item is best suited for that task. Damage to a unit caused by an inadequate inverter/generator is not covered under warranty.

Safe Operation of Carry-On

1. Use cord labled with LCDI or AFCI to connect to power source (see warning).

2. Using the Carry-On is not recommended while the boat is under way.

3. Prevent accidents or damage to Carry-On. Always carry or move unit using the handles. Unplug at receptacle and Carry-On control panel prior to moving.

4. Do not disassemble Carry-On.

5. Be certain the Carry-On has been properly installed according to the Installation Instructions.

6. Physical and electrical conditions vary greatly from location to location.

(a.) Be sure the electrical service is adequate and equipped with a circuit breaker (15 amps minimum for 115V units, 10 amps minimum for 220V units).

(b.) Use a three-prong (grounded) power cord rated at 15 amps minimum for 115V units or 10 amps minimum for 220V units, with a length no longer than needed to reach from the installed Carry-On to a grounded, 3-wire receptacle on your boat, or to a suitable grounded dockside outlet (order part number LCDI25).

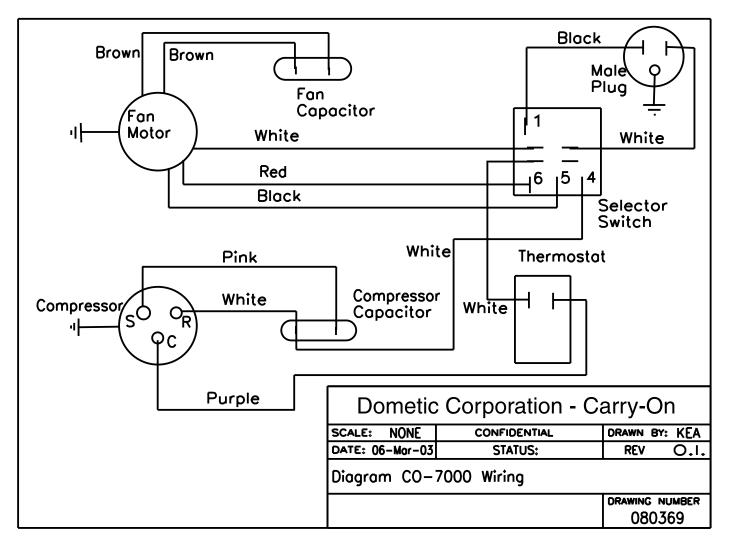
(c.) DANGER - SHOCK HAZARD! Do not, under any circumstances, cut or remove the grounding prong from the end of your power cord. Your Carry-On must be used with a three-prong grounding power cord and connected to a properly grounded and polarized three prong receptacle. DO NOT USE AN ADAPTOR PLUG, OR A TWO BLADE ADAPTOR PLUG THAT BYPASSES THE GROUNDING IN ANY WAY!!!

(d.) It is always desirable to have your on-board or shoreside receptacle protected by a time delay fuse or circuit breaker.

7. If the Carry-On operation is interrupted (turned off, plug pulled out, thunderstorm, etc., accidentally or otherwise)

after operation in the COOL mode, WAIT 3 MINUTES BEFORE RESTARTING. This allows pressure inside the compressor to equalize. Consequences of attempted restart within the 3 minute period may be a tripped circuit breaker or blown fuse. In this case, turn Carry-On to "OFF", reset breaker (or replace fuse), wait 3 minutes, then restart.

8. If the Carry-On has been stored in any position other than upright within 10 degrees of level, then, after installing, wait 30 minutes to allow compressor oil to settle to the bottom of the compressor. Otherwise permanent damage may occur, voiding the warranty.



Wiring Diagram

Carry-On 7000 Portable Air Conditioners • Installation

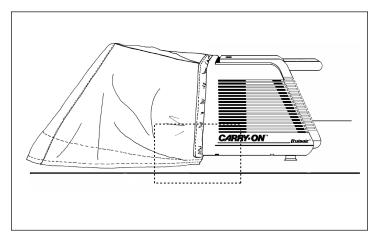


Figure 1. The Carry-On positioned in the boat hatch with the Hatch Bag in place. See inset Figure 2.

1. Place in open hatch as shown. (See Figure 5.) Adjust Carry-On so that the hatch pad protects and insulates the hatch and the Carry-On unit. Make sure that movement of Carry-On is stifled due to wedging action of the hatch pad as it presses against hatch edge.

NOTE: Carry-On may be further secured using the D-ring type "tie downs".

2. Place hatch bag over Carry-On in grooves provided. Do not allow hatch bag to cover air intake vents or condensate drain. (See Fig. 1.)

3. Adjust the hatch bag over the hatch cover and hatch opening. The hatch bag is designed to keep outside air from entering the hatch while the Carry-On is in use. The fit should be as snug as possible. Use the battens provided to form the deckframe. Slide the battens into the pockets provided. Note that there is an alternative set of batten pockets for use with a smaller hatch. Should you decide to

Figures 3a & 3b. These figures show proper and improper positioning and leveling of the Carry-On unit in the boat hatch. It is very important that the Carry-On be level.

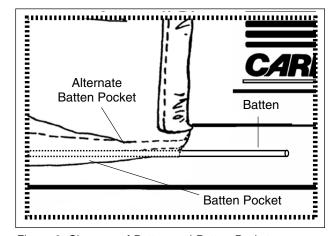
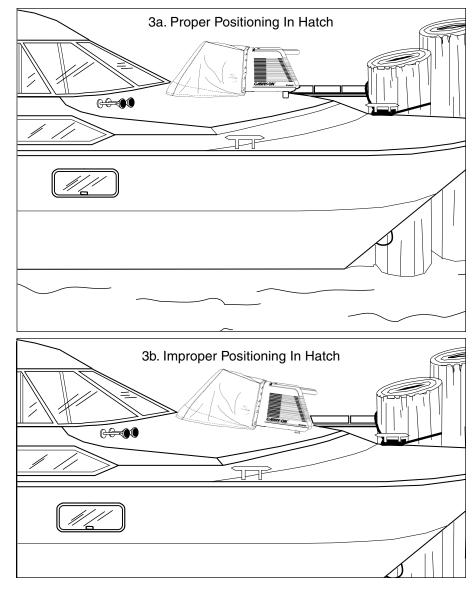


Figure 2. Close-up of Batten and Batten Pockets



use the alternative batten pockets, you must cut the battens to size. A more weathertight seal can be achieved if you adapt the hatch bag to your boat using a Velcro® brand fastener, or snaps. Consult your marine dealer or canvas shop if you need help.

4. Level unit with adjustable cam and leg. Adjust the leg until the indicator bubble is away from the side of the level. It is not necessary to exactly center the bubble. If your hatch location is such that the Carry-On cannot be leveled with the leg fully extended, you must provide an additional means of support to allow the degree of leveling described. Under no circumstances should the Carry-On be operated more than 10 degrees off level, since this could cause loss of proper lubrication to internal parts and void the warranty (See Figures 3a & 3b).

5. A condensate drain is located under the unit (See Figure 4) in a position such that water removed from the air is allowed to drain onto the deck. Should you desire to drain this water to another area, a 3/8" I.D. (See Figure 4) hose fits the condensate drain.

NOTE: The hose must be routed downhill continually with no "up" loops or air traps.

6. You are now ready to operate the Carry-On. Follow the operating instructions.

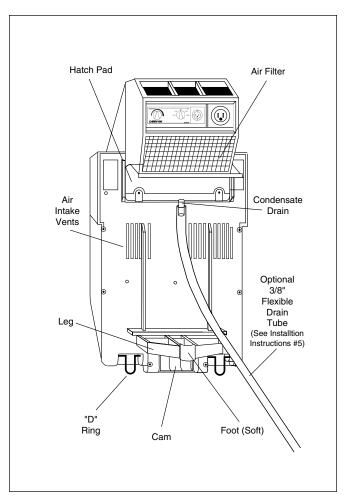


Figure 4. Bottom View of Carry-On

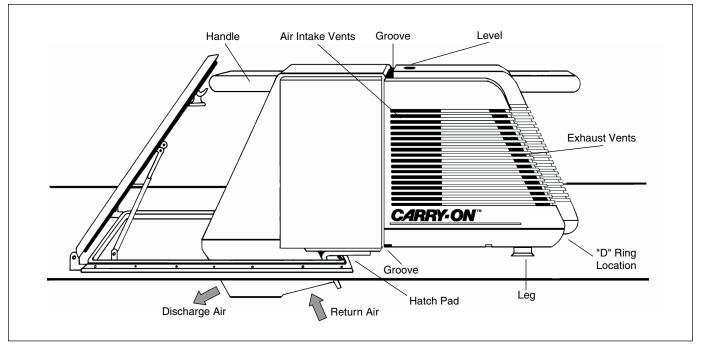
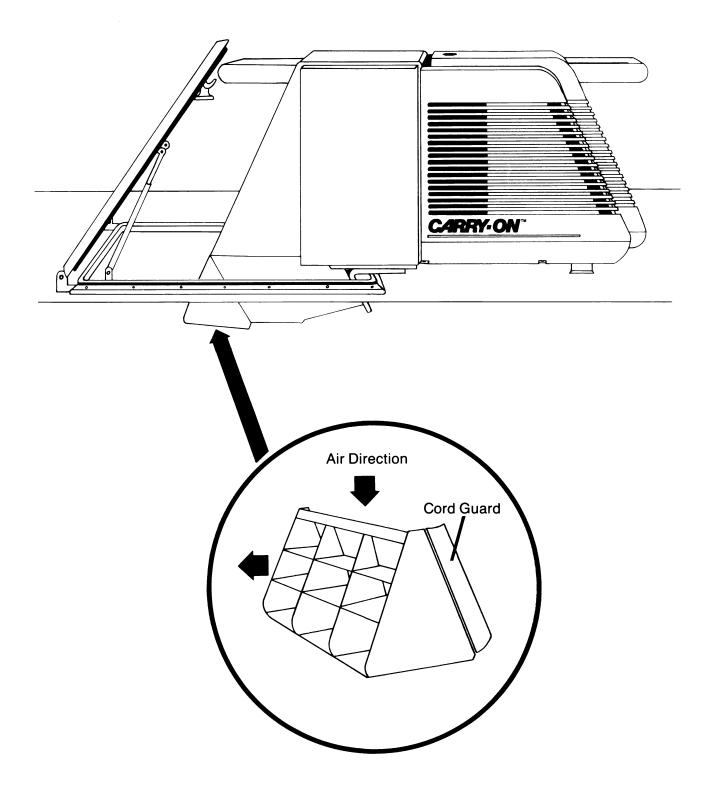


Figure 5. The Carry-On positioned in the hatch of a boat without the hatch bag.

AIR DEFLECTOR (Standard for Carry-On 7000 and 7020)



Carry-On 7000 Portable Air Conditioners • Operation

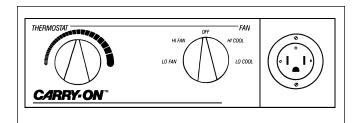
1. Plug in Carry-On.

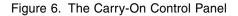
2. Set the thermostat at the coldest setting (fully clockwise).

3. Set the FAN/COOL selector at HI COOL.

4. Close all windows, vents, hatches, doors and exhaust fans in the area to be cooled by your Carry-On.

5. Once your cabin or boat has cooled, adjust the thermostat and fan speed to suit your comfort level.





Carry-On 7000 Portable Air Conditioners • Operational Features

Automatic Thermostat

When either HIGH or LOW COOL MODE is selected, the thermostat automatically turns the compressor on and off in response to the cabin temperature. The fan will run continuously, circulating air in your boat.

You may find it desirable, once the cabin is comfortable, particularly after sundown, to adjust the thermostat away from the coolest setting before retiring.

After some experience, you will know the optimum setting for your ideal sleeping conditions.

FAN/COOL Selector

The FAN/COOL selector control allows a choice of either cooling cabin air on HI COOL/LOW COOL, or circulating cabin air at existing temperature on HI FAN/LOW FAN. The HIGH/LOW settings in either FAN or COOL determine the air speed only.

Note: The Carry-On will dehumidify your cabin. As the humidity level drops, the cool air from the Carry-On will increase.

Carry-On 7000 Portable Air Conditioners • Cleaning & Storage

Cleaning Instructions

Clean the Carry-On occasionally to keep it looking new and operating properly. Be sure to unplug the Carry-On before cleaning.

Air Filter

Remove filter. (See Figure 4.) Gently wash by hand in a solution of mild soap and warm fresh water. Allow water to drain and reinstall. Extra filters may be ordered from your dealer.

Cabinet

Wash with mild soap and fresh water. For tougher stains or scuffs, SOFT SCRUB[®] may be used. Though Carry-On is designed for adverse conditions, do not intentionally spray water directly into air slots.

Care of Hatch Bag and Storage Cover*

The Hatch Bag and Storage Cover are made out of a fabric called SUNBRELLA, and should be cleaned regularly before substances such as dirt, dust, etc. are allowed to accumulate on it and become embedded in the fabric.

Regular Cleaning: The fabric can be cleaned by simply brushing it off with a clean brush. It may also be hosed down and cleaned with a mild solution of a natural soap such as LUX[®] or IVORY LIQUID[®] in lukewarm water (not to exceed 100 degrees F.) Rinse thoroughly to remove soap. Do not use detergents! For more stubborn cases: You may soak the Hatch Bag or the Storage Cover for approximately twenty minutes in a solution of no more than 1/2 cup (4 oz.) CLOROX[®] and 1/4 cup IVORY or LUX SOAP per gallon of warm water. Rinse thoroughly in cold water to remove all of the soap.

NOTE: Excessive soaking in CLOROX can deteriorate sewing threads. This method of cleaning may remove part of the water repellency and the fabric should receive an application of a marine water repellent treatment such as 3M[®] 303 waterproofing.

Storing Instructions

The Carry-On Hatch Bag and Storage Cover should be cleaned, allowed to dry and stored in a dry, well-ventilated area.

When storing the Carry-On unit for long periods of time, it is advisable to purchase the Storage Cover (accessory), cover it with plastic or return it to the original carton. STORE IN OPERATING POSITION in a dry place. These precautions will prevent the accumulation of dust and airborne particles from lowering the efficiency of future performance or necessitating more frequent cleaning.

*The Storage Cover is an optional accessory which was intended to cover the entire Carry-On and help protect it from dirt and dust while being stored away from the boat.

Carry-On 7000 Portable Air Conditioners • Troubleshooting

Before you call for service, review this list. It may save you time and expense. This list contains common occurrences that are not a result of defective workmanship or materials.

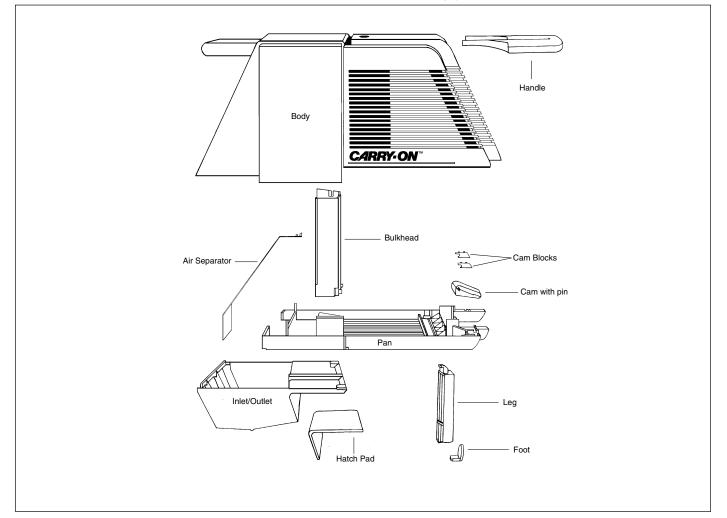
Important: Boat must be closed so that outside air is prevented from access to the inside. Close all hatches and ventilators.

Problem	Possible Cause	Action
Unit will not operate	 Plug disconnected from receptacle or unit Blown fuse or tripped circuit breaker 	 Connect firmly Replace fuse with time delay type; or reset breaker, check for adequate size (minimum 15 or adequate size (minimum 15)
	3. Thermostat set incorrectly	amps at 115V & 10 amps at 220V) 3. Adjust thermostat to cooler setting
Air from unit does not feel cool enough in cool mode	 Selector switch on FAN Thermostat set incorrectly Boat temperature below 70° F Air intakes on heat exchanger blocked or restricted. 	 Move to COOL Turn clockwise to cooler setting. Cooling may not begin until boat is above 70° Be certain all air intake vents (See Figure 4) are clear of hatch bag or other obstructions.
Carry-On operating, but cabin failing to cool	 Dirty air filter Thermostat set too cold for night time cooling and the evaporator coil has frozen Air intakes on heat exchanger blocked or restricted. 	 Clean filter Turn selector switch to FAN position for three minutes and reset thermostat to a warmer setting or use hair dryer to thaw coil Be certain all air intake vents (See Figure 4) are clear of hatch bag or other obstructions.
Carry-On turns compres- sor on and off rapidly	 Dirty air filter Outside temperature extremely hot 	1. Clean air filter 2. Turn to HI COOL
Water dripping inside cabin through hatch	 Improper installation Condensate drain blocked Bag over condensate drain Blockage in hose 	 Tilt Carry-On to accommodate angle of condensate drain Clean out condensate drain Adjust bag to clear drain Clear hose; check downhill routing of hose; You may connect a 3/8" I.D. plastic hose to the condensate drain and send that water overboard.
Water dripping outside on weatherdeck	 Condensate drain-normal Compressor area-normal 	1. Drains are provided to allow rainwater to drain; Some drainage may occur due to water condensing in compressor spaces

If you need service after reviewing the preceding troubleshooting checklist, call your dealer.

Carry-On 7000 Portable Air Conditioners • Parts List

ATTENTION: Owners or Independent Service Companies: Use the following guide if replacement parts are required.



Part No. Description

1013 CO-Thermostat Air Temp (Ranco)
1014 CO-Switch 2-SPD Short
1025 CO-Plug 125V 15A Male
1027B CO-Fan Motor 115V
1050B CO-Fan Motor 220V
1054 CO-Plug 220V Female
4001 CO-Filter
4010 CO-Level Acrylic Rnd
4012 CO-Hatch Bag
4013 CO-Batten 23" X 1/4" LDPE Rod
4014 CO-Batten 25.5" X 1/4" LDPE Rod
4018 CO-Fan Blade Assy - Evaporator (Resil)
4019 CO-Fan Blade Assy - Cond. Alum Hub
5005 CO-Cam W/Pin
5011 CO-Bulkhead
5012 CO-Pan
5017 CO-Foot
5023 CO-Shroud Condenser
5024 CO-Knob Blk Plastic W/White Pointer

Part No. **Description** 7010B CO-Evap. Assembly 11.875 x 8 13FPI 3ROW 7011 CO-Condenser Assembly 3014007 CO-Compressor 115V 3014207 CO-Compressor 220V 50HZ 9510 CO-Body Assembly (PL-0001) 9511 CO-Leg Assembly (PL-0002) 9512 CO-Inlet/Outlet Assembly (PL-0004) 4040135 Capacitor Run 35 MFD, Compressor 115VAC 4040115 Capacitor Run 15 MFD, Compressor 220 VAC 4040110 Capacitor Run 10 MFD, Fan **Accesories** Part No. **Description** PL-0018 Air Deflector A-293 Air Deflector Extender Plenum (Extends Air Deflector #PL-0018 straight down by approximately 9") LCDI25 Leakage Current Detection/Interruption Protector (25 ft. Electrical Power Extension Cord) MI-0025 White Storage Cover MI-0026 Blue Storage Cover

Dometic CARRY-ON Air Conditioners

As hereinafter described, Dometic Corporation (Dometic) limits the duration of any implied warranty to the duration of the express warranty provided herein and also disclaims any liability for consequential damages arising from any application, installation, use or malfunction of any warranted product.

Section I: What does the limited Warranty cover?

Products manufactured by Dometic are under limited warranty to be free from defects in workmanship or materials under normal use and service with the obligation of Dometic under this limited warranty being limited to replacing or repairing any components(s) which shall disclose defects within one year from date of purchase and which upon examination by Dometic or an authorized Dometic Service Center shall appear to the satisfaction of Dometic to be defective or not up to specifications. For warranty claims/ repair, please contact Dometic Corporation, 8433 Erle Road, Mechanicsville, Virginia 23116 or call (804) 746-1313.

This limited Warranty is made in lieu of all other express warranties, obligations, or liabilities on the part of Dometic. In addition, Dometic shall not be responsible for, without limitation, any incidental or consequential damages. In those instances in which a cash refund is made, such refund shall effect the cancellation of the contract of sale without reservation of rights on the part of the purchaser. Such refund shall constitute full and final satisfaction of all claims which purchaser has or may have against Dometic due to any actual or alleged breach of warranty, either express or implied, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. Some states do not allow the exclusion or limitation of incidental or consequential damages so the foregoing limitation or exclusion may not apply to you. The terms and conditions of the warranty shall be governed by the laws of the Commonwealth of Virginia.

The Dealer is not an agent for Dometic except for the sole purpose of administering the above warranty to the extent herein provided, and Dometic does not authorize the dealer or any other person to assume for Dometic any liability in connection with such warranty, or any liability or expense incurred in the replacement or repair of its products other than those expressly authorized herein. Dometic shall not be responsible for any liability or expense except as is specifically authorized and provided in this section. This warranty gives you, the purchaser, specific legal rights, and you may also have other rights which vary from state to state. You also have implied warranty rights, including an implied warranty of merchantability, which means that your product must be fit for the ordinary purposed for which such goods are used. The duration of any implied warranty is limited to the duration of the foregoing express warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty extends only to the original purchaser (or, in the case of resale by Dometic, to the purchaser from Dometic) of Dometic warranted equipment and any other such person who is entitled, under applicable state law, to enforce against Dometic the obligations of the warranty.

Section II: What does the limited Warranty not cover?

The limited warranty and any implied warranty shall not apply to:

1. Failures resulting from abuse, accident, fire or submergence or failure to adhere to the foregoing installation, operation and care and cleaning instructions provided by Dometic.

2. Any part manufactured by Dometic which shall have been altered.

GENERAL: Since it is the responsibility of the consumer to establish the warranty period by verifying the original purchase date, Dometic Corporation recommends that a bill of sale, or some other appropriate record be kept for that purpose.

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Warning

Dometic Corporation (Dometic) manufacturers of Cruisair, Grunert, Marine Air and Sentry Products, makes the following safety warnings concerning the application, installation, use and care of its products. Although these warnings are extensive, there may be specific hazards which may arise out of circumstances which we have not outlined herein. Use this as a guide for developing an awareness of potential hazards of all kinds. Such an awareness will be a key factor in assuring your SAFETY and comfort.

ELECTRICITY - Many Dometic products operate on 115, 230 or 440 volt AC power. Such voltages can be LETHAL; therefore, the chassis, cabinets, bases, etc., on all components must be grounded together and connected to the vessel's grounding system. Sparks can occur as switches, thermostats and relays open and close in the normal operation of the equipment. Since this is the case, ventilating blowers for the removal of hazardous fumes or vapors should be operated at least 5 minutes before and during operation of any Dometic product or group of Dometic products. All electrical connections must be covered and protected so accidental contact cannot be made by persons using the equipment, as such contact could be LETHAL.

ELECTROLYSIS - Electrical leakage of any component can cause electrolytic deterioration (electrolysis) of thru-hull components which could result in leakage serious enough to sink a vessel which could result in loss of life. All Dometic's components must be kept clean and dry and checked periodically for electrical leakage. If any electrical leakage is detected, the component should be replaced or the fault causing the leakage corrected before the component is put back into service.

GAS - CRUISAIR, MARINE AIR and GRUNERT components utilize R134a, R417a, or R22 refrigerant, tetrafluoro-ethane or R404A which are non-toxic, nonflammable gases; however, these gases contain no oxygen and will not support life. Refrigerant gas tends to settle in the lowest areas of the compartment. If you experience a leak, evacuate all personnel, and ventilate area. Do not allow open flames in the area of leaks because refrigerant gas, when burned, decomposes into other potentially LETHAL gases. Refrigerant components operate at high pressure and no servicing should be attempted without gloves, long-sleeved clothing and eye protection. Liquid refrigerant gas can cause severe frost burns to the skin and eyes.

VENTILATION - To cool or heat air, CRUISAIR, MARINE AIR and GRUNERT components are designed to move air through a heat exchanger by a blower or propeller fan. This design necessarily produces a suction on one side of the air handling component and a pressure on the other side. Air handling components must be installed so that the suction-pressure action does not: (1) pressurize an area to the extent that structural failure occurs which could cause harm to occupants or bystanders, or (2) cause a suction or low pressure in an area where hydrogen gas from batteries, raw fuel vapor from fuel tanks, carbon monoxide from operating propulsion engines, power generators or heaters, methane gas

from sewage holding tanks, or any other dangerous gas or vapor could exist. If an air handling unit is installed in such a manner that allows potentially lethal gases or vapors to be discharged by the air handling unit into the living space, this could result in loss of life.

Maximum protection against the introduction of dangerous gases or vapors into living spaces can be obtained by providing living spaces which are sealed from all other spaces by use of airtight bulkheads and decks, etc., and through the introduction of clean air into the living space. Bear in mind that the advent of air conditioning, whether it be for cooling or for heating, naturally leads to the practice of closing a living space tightly. Never close all windows and doors unless auxiliary ventilating systems, which introduce clean outside air into the living space, are used. Always leave enough window and door openings to provide adequate ventilation in the event potentially lethal gases or fumes should escape from any source.

CONDENSATE - All cooling units produce water condensate when operating on the cooling cycle. This water must be drained from the cooling unit overboard. If condensate is allowed to drip on a wooden structure, rotting or decay and structural failure may occur which could result in loss of life. If condensate is allowed to drip on electrical components, deterioration of the electrical components could result in hazardous conditions. When an air conditioning system is in operation, condensate drains may be subjected to negative pressure. Always locate condensate drains as far as possible from points where engine waste and other dangerous gases are exhausted so no such dangerous gases can be drawn into the condensate drains.

Warning

Never sleep in a closed area on a boat when any equipment, which functions as a result of the combustion of a volatile fuel, is in operation (such as engines, generators, power plants, or oil-fired heaters, etc.) At any time, the exhaust system of such devices could fail, resulting in a build-up of LETHAL gases within the closed area.

Warning Revised: 1-12-04



Dometic Corporation

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Dometic The Sign of Comfort