OWC series
Deluxe Portable Water-Cooled Spot Cooler

ENGINEERING, INSTALLATION AND SERVICE MANUAL

OCEANAIRE
“providing a better climate.....anywhere”

WATER COOLED

OA-EISM-OWC 04142016
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Category</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL INFORMATION</td>
<td>1</td>
</tr>
<tr>
<td>PRODUCT DATA AND SPECIFICATIONS</td>
<td>2</td>
</tr>
<tr>
<td>UNIT DESCRIPTION</td>
<td></td>
</tr>
<tr>
<td>Standard Features</td>
<td>3</td>
</tr>
<tr>
<td>Applications / Operation</td>
<td>4</td>
</tr>
<tr>
<td>Electrical Configurations</td>
<td>5</td>
</tr>
<tr>
<td>Use of Extension Cords</td>
<td>6</td>
</tr>
<tr>
<td>Accessories</td>
<td>7 - 11</td>
</tr>
<tr>
<td>Options / Special Order</td>
<td>12</td>
</tr>
<tr>
<td>Installation</td>
<td>13</td>
</tr>
<tr>
<td>Electronic Controller</td>
<td>14 - 16</td>
</tr>
<tr>
<td>SERVICE</td>
<td></td>
</tr>
<tr>
<td>Water Valve Adjustment, Unit Interior..........</td>
<td>17</td>
</tr>
<tr>
<td>Replacement Parts Procedure</td>
<td>18</td>
</tr>
<tr>
<td>Troubleshooting Guide</td>
<td>19</td>
</tr>
<tr>
<td>Preventive Maintenance</td>
<td>20</td>
</tr>
<tr>
<td>DIAGRAMS</td>
<td></td>
</tr>
<tr>
<td>Piping Schematic</td>
<td>21</td>
</tr>
<tr>
<td>Single Phase Wiring Diagrams</td>
<td>22-24</td>
</tr>
<tr>
<td>Three Phase Monitor</td>
<td>25</td>
</tr>
<tr>
<td>Three Phase Wiring Diagrams</td>
<td>26 - 28</td>
</tr>
<tr>
<td>WARRANTY</td>
<td>29</td>
</tr>
<tr>
<td>END USER INFORMATION AND TECH NOTES</td>
<td>Back Page</td>
</tr>
</tbody>
</table>

## FORWARD

This manual provides the user with basic details for the installation and operation of the OceanAire OWC spot cooler. It is recommended to read and fully understand the instructions outlined within this manual, before operating the OWC unit.

As with all commercial air conditioning equipment, it is recommended to have the OWC sized and installed by a licensed specifying engineer and contractor, in accordance with all local and state codes. The length of service received can be extended by following the installation and preventive maintenance instructions.

## NOTICE

In our ongoing process of continuous improvement, the items and procedures described in this manual are subject to change without notice. Please note model and serial number of the OWC unit when contacting the factory.
GENERAL INFORMATION

The OceanAire OWC is a portable water-cooled air conditioner designed for permanent or temporary spot cooling applications. The entire unit has been built in a premium sheet metal cabinet, equipped with heavy-duty casters for mobility. All OWC models come with a 10-foot power cord for electrical connection and added mobility in service. These spot-coolers are designed to direct air to specific areas or objects through a discharge grill located on the upper-front of the unit. The OWC models range in cooling capacities from 12,000 BTU/HR to 60,000 BTU/HR to satisfy most space cooling requirements.

The OWC is a self-contained unit with the entire cooling system (blower assembly, electrical, refrigerant, and waterside components), neatly arranged in a gray polyester powder coated metal cabinet. When connected to the proper source of electrical power, the deluxe electronic controller provides the desired level of comfort and cooling.

A wide variety of accessories and factory installed options are available for the OWC units allowing for improved performance and versatility.

NOMENCLATURE

DELUXE PORTABLE

WATER-COOLED

VOLTAGE

PHASE (1 or 3)

NOMINAL CAPACITY

CAPACITY RATING

12........12,000 BTU/HR
18........18,000 BTU/HR
24........24,000 BTU/HR
36........36,000 BTU/HR
60........60,000 BTU/HR

WARRANTY CARD

It is important that the warranty card be filled out completely and returned to the factory within fourteen (14) days of installation of the unit in order to receive the benefits of the warranty.
SPECIFICATIONS

<table>
<thead>
<tr>
<th>MODEL: OWC</th>
<th>1211</th>
<th>1811</th>
<th>2412</th>
<th>3612</th>
<th>3632</th>
<th>3634</th>
<th>6012</th>
<th>6032</th>
<th>6034</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling Capacity</td>
<td>12,000</td>
<td>18,000</td>
<td>23,950</td>
<td>36,100</td>
<td>36,100</td>
<td>36,100</td>
<td>60,100</td>
<td>60,100</td>
<td>60,100</td>
</tr>
<tr>
<td>Voltage (Volts/Phase) at 60Hz</td>
<td>115/1</td>
<td>208-230/1</td>
<td>208-230/3</td>
<td>460/3</td>
<td>208-230/1</td>
<td>208-230/3</td>
<td>460/3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Amps</td>
<td>8.1</td>
<td>11.3</td>
<td>9.9</td>
<td>12.0</td>
<td>9.3</td>
<td>4.7</td>
<td>23.7</td>
<td>16.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Unit Watts</td>
<td>930</td>
<td>1300</td>
<td>2100</td>
<td>2700</td>
<td>2700</td>
<td>2700</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td>In Rush Current (Amps)</td>
<td>56</td>
<td>69</td>
<td>55</td>
<td>100</td>
<td>80</td>
<td>48</td>
<td>165</td>
<td>149</td>
<td>75</td>
</tr>
<tr>
<td>EER</td>
<td>12.9</td>
<td>13.8</td>
<td>11.4</td>
<td>13.4</td>
<td>13.4</td>
<td>13.4</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Compressor HP</td>
<td>1</td>
<td>1 1/2</td>
<td>2</td>
<td>3.5</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Compressor RLA</td>
<td>9.5</td>
<td>12.3</td>
<td>10.5</td>
<td>13.6</td>
<td>8.8</td>
<td>5.0</td>
<td>27.6</td>
<td>18.1</td>
<td>9.0</td>
</tr>
<tr>
<td>Compressor LRA</td>
<td>50</td>
<td>63</td>
<td>48</td>
<td>83</td>
<td>77</td>
<td>35</td>
<td>158</td>
<td>137</td>
<td>62</td>
</tr>
<tr>
<td>Evap CFM</td>
<td>400</td>
<td>600</td>
<td>810</td>
<td>1200</td>
<td>1200</td>
<td>1200</td>
<td>1200</td>
<td>1950</td>
<td>1950</td>
</tr>
<tr>
<td>Evap Motor HP</td>
<td>1/8</td>
<td>1/8</td>
<td>1/3</td>
<td>1/3</td>
<td>1/3</td>
<td>1/3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Evap Motor Watts</td>
<td>130</td>
<td>210</td>
<td>350</td>
<td>375</td>
<td>375</td>
<td>420</td>
<td>670</td>
<td>670</td>
<td>670</td>
</tr>
<tr>
<td>Cond Water Flow (GPM) at 60°F inlet</td>
<td>0.75</td>
<td>1.1</td>
<td>1.55</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>at 85°F inlet</td>
<td>3</td>
<td>4.5</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Cond Coil Pressure Drop-PSI</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Water Valve Pressure Drop PSI</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drain (Return) Connection</td>
<td>3/8 MF</td>
<td>5/8 MF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condensate Pump (ALL UNITS)</td>
<td>20 Ft Lift - 3/8 MF Connection On Unit - DRAIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound Level</td>
<td>52</td>
<td>57</td>
<td>60</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>69</td>
<td>69</td>
<td>69</td>
</tr>
<tr>
<td>R-410A Charge OZ</td>
<td>14</td>
<td>18</td>
<td>16</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>52</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>(A) Height with Casters (in.)</td>
<td>31 1/2</td>
<td>37 1/2</td>
<td>50-1/4</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(D) Height Without Casters (in.)</td>
<td>28 1/2</td>
<td>34 1/2</td>
<td>45</td>
<td>45 1/4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B) Width (in.)</td>
<td>20 1/8</td>
<td>24 1/4</td>
<td>28-1/4</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(C) Depth (in.)</td>
<td>13 1/8</td>
<td>13</td>
<td>18</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Weight (lb.)</td>
<td>125</td>
<td>155</td>
<td>170</td>
<td>275</td>
<td>305</td>
<td>305</td>
<td>375</td>
<td>410</td>
<td></td>
</tr>
<tr>
<td>Shipping Weight (lb.)</td>
<td>145</td>
<td>175</td>
<td>190</td>
<td>305</td>
<td>335</td>
<td>430</td>
<td>465</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipping Volume (cu.ft.)</td>
<td>9</td>
<td>12</td>
<td>23</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTES
1. Dedicated Circuit and Time Delay fuse or circuit breaker are recommended
2. Cooling Capacity is total BTUH at 80ºDB/67º WB return air, with 85º EWT and 105º LWT
3. CMF with free discharge
4. Cooling EER is determined at high fan speed
5. Sound Pressure, dB at 5 feet, commercial operation
6. Amps & Watts at 208 Volts (208-230 V Models)

COOLING AMBIENT* OPERATING RANGE 65º TO 105º

* May COOL down to 55º if equipped with hot gas bypass (factory installed)

NOT Approved FOR OUTDOOR USE

WARRANTY
ALL OCEANAIRE PRODUCTS ARE COVERED BY THE OCEANAIRE LIMITED WARRANTY
PLUS, 4 ADDITIONAL YEARS FOR THE COMPRESSOR (RESTRICTIONS APPLY)

1 YEAR ON THE FULL PRODUCT

MADE IN THE USA

WATER COOLED
STANDARD FEATURES

CABINET
The OWC-Series cabinet is constructed of 18 gauge steel with a gray polyester powder coated finish that will compliment any decor. The entire cabinet is insulated with sound-absorbing insulation for cool, quiet comfort. All units come equipped with swivel casters for portability and convenient set-up.

DELUXE ELECTRONIC CONTROLLER
All OWC units are equipped with a deluxe electronic controller. When power is connected to the unit, the thermostat will control the unit to cool a space to the desired temperature. The thermostat is also capable of controlling the fan to operate automatically (when needed), or continuously. To protect the compressor from short-cycling, there is a built-in time delay in the thermostat. In the event of a power outage, all thermostat settings are saved, and the unit will re-start automatically.

FAN SPEED CONTROL
The deluxe electronic controller is capable of setting fan speeds automatically or manually. In AUTO mode, the fan speed adjusts in accordance to cooling conditions. In MANUAL mode, the fan speed can be maintained at any one of six speed levels, from low to high.

CONDITION ALARM—CON
The LED thermostat of the OWC will display the word “CON”. CON indicates a fault condition that needs to be addressed:
CONDENSATE PUMP...disabled / restricted drain tube/routed incorrectly
WATER SUPPLY...........turned off / interrupted flow
EITHER CONDITION WILL TRIP THE HIGH PRESSURE SAFETY SWITCH. See below.

CONDENSATE PUMP
All OWC units come equipped with an Automatic Condensate Pump that removes the condensate. The pump discharges through a 3/8 male flare DRAIN connection located on the back of the unit. The pump is capable of pumping to a 20-foot height, to handle almost any installation requirement.

HIGH PRESSURE (HP) SWITCH
Located on the back of the OWC unit is a manual re-set high pressure switch, used for the protection of the compressor in the event that the condenser water supply is turned off. If the condensing pressure exceeds the limit setting, the switch cycles off the compressor, while the evaporator fan remains running, and the default “CON” will display on the controller. The high pressure switch is also wired in series with the condensate pump. If a failure occurs with the operation of the pump circuit, the HP switch will open. Once the water interruption/condensate pump failure has been corrected, turn the unit off, reset the switch by depressing the red RESET button on the back of the unit, and restart the unit.

FILTERS
All OWC units are equipped with a washable filter at the air intake. An electrostatic mesh air filter is located behind the evaporator return air grille to filter the air before it is cooled, keeping the coil free from dust build-up. The filter can be easily removed and cleaned.

POWER CORDS
All OWC units come standard with a power cord for a convenient connection. All models, except for the 3-phase units and 5-ton units, are equipped with LCDI for added safety features.
APPLICATIONS

SPOT COOLER
The OWC can be used in an open environment to cool specific objects or "spots". Spot Cooling is a convenient and economical way to provide air conditioning where cooling the entire space is impractical. Cool air is discharged from the unit and is directed where it is needed. Nozzle kits can be used to improve direction of the cooling airflow.

ROOM AIR CONDITIONER
One feature of the OWC is it operates as a room air conditioner because it uses water as the means for heat rejection. The major advantage of water-cooled air conditioning is the convenience of connecting water hoses, or lines, as compared to the installation of condenser air ducts used for air-cooled portables. A variety of hose kit lengths are available that can be used for connecting to a water supply and drain, while providing portability within the conditioned space.

OWC—OPERATION / DESCRIPTION

DELUXE ELECTRONIC CONTROLLER (THERMOSTAT)
EVAPORATOR FAN DISCHARGE “COOL”
GRILLE AND WASHABLE FILTER
RETURN AIR INLET
WATER IN
WATER OUT
DRAIN
ELECTRICAL CONFIGURATION

All OWC Series units are equipped with a standard 10-foot long service cord with plug configurations and receptacle requirements as shown in this chart. OWC1211, OWC1811, OWC2412 and OWC3612 units come with LCDI (Leakage Current Detection & Interruption) devices that serve as a means of electrical protection.

CAUTION
DO NOT USE THE LCDI AS AN ON/OFF SWITCH FOR THE UNIT

All 3-phase models are equipped with locking plugs for added connection reliability. Refer to the chart below for plug and receptacle details for all OWC models.

A DAMAGED LCDI POWER SUPPLY CORD MUST BE REPLACED WITH A NEW POWER SUPPLY CORD AND NOT REPAIRED

<table>
<thead>
<tr>
<th>UNIT/MODEL</th>
<th>PLUG CONFIGURATION</th>
<th>RECEPTACLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>115 Volt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OWC1211</td>
<td>15A-125 VOLT NEMA 5-15P</td>
<td>NEMA 5-15R</td>
</tr>
<tr>
<td>OWC1811</td>
<td></td>
<td></td>
</tr>
<tr>
<td>208-230 Volt Single Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OWC2412</td>
<td>20A-250 VOLT NEMA 6-20P</td>
<td>NEMA 6-20R</td>
</tr>
<tr>
<td>OWC3612</td>
<td></td>
<td></td>
</tr>
<tr>
<td>208-230 Volt Single Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OWC6012</td>
<td>30A-250 VOLT NEMA 6-30P</td>
<td>NEMA 6-30R</td>
</tr>
<tr>
<td>208-230 Volt 3-Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OWC3632</td>
<td>20A-250 VOLT NEMA L15-20P</td>
<td>NEMA L15-20R</td>
</tr>
<tr>
<td>208-230 Volt 3-Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OWC6032</td>
<td>30A-250 VOLT NEMA L15-30P</td>
<td>NEMA L15-30R</td>
</tr>
<tr>
<td>460 Volt 3-Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OWC3634</td>
<td>20A-460 VOLT NEMA L16-20P</td>
<td>NEMA L16-20R</td>
</tr>
<tr>
<td>OWC6034</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
USE OF EXTENSION CORDS

CAUTION

FOR MODELS OWC1211 AND OWC1811 AN EXTENSION CORD CAN BE USED PROVIDED IT IS RATED AT LEAST 15 AMPS @ 115 VOLTS WITH GROUNDING-TYPE ATTACHMENT PLUG AND GROUNDING TYPE CONNECTOR (LOAD FITTING)

FOR MODELS OWC2412 and OWC3612 AN EXTENSION CORD CAN BE USED PROVIDED IT IS RATED AT LEAST 20 AMPS @ 250 VOLTS WITH GROUNDING-TYPE ATTACHMENT PLUG AND GROUNDING TYPE CONNECTOR (LOAD FITTING)

FOR MODEL OWC6012 AN EXTENSION CORD CAN BE USED PROVIDED IT IS RATED AT LEAST 30 AMPS @ 250 VOLTS WITH GROUNDING-TYPE ATTACHMENT PLUG AND GROUNDING TYPE CONNECTOR (LOAD FITTING)

FOR MODEL OWC3632 AN EXTENSION CORD CAN BE USED PROVIDED IT IS RATED AT LEAST 20 AMPS @ 250 VOLTS, 3 PHASE

FOR MODEL OWC6032 AN EXTENSION CORD CAN BE USED PROVIDED IT IS RATED AT LEAST 30 AMPS @ 250 VOLTS, 3 PHASE

FOR MODELS OWC3634 AND OWC6034 AN EXTENSION CORD CAN BE USED PROVIDED IT IS RATED AT LEAST 20 AMPS @ 600 VOLTS, 3 PHASE

SPECIAL NOTICE—THREE PHASE OPERATION

Models OWC3632, OWC3634, OWC6032 and OWC6034

All three-phase OWC models are equipped with a three-phase monitor for added compressor protection. The phase monitor, located in the control box, has multi-color LED that reports status. The monitor protects the compressor from reverse operation, phase loss and low voltage situations. Further description of the three-phase monitor is located in the electrical section of the manual.

NOTICE - DO NOT OPERATE ANY THREE-PHASE UNIT WHILE BY-PASSING THE MONITOR. THIS WILL VOID THE WARRANTY.
**NOZZLE KIT**

NK-1 (2 X 4-Inch) OWC12
NK-2 (2 X 6-Inch) OWC18, 24
2NK-3 (2 X 8-Inch) OWC36, OWC60

**EVAPORATOR RETURN AIR PLENUM**

DEP-10 (10-Inch Round) OWC12
2DEP-12 (12-Inch Round) OWC18, 24
DEP-16 (16-Inch Round) OWC36, 60

**DISCHARGE DUCT ADAPTER**

DDA-6 (6-Inch Round) OWC12
DDA-10 (10-Inch Round) OWC18, 24
2DDA-16 (16-Inch Round) OWC36, OWC60

**HOSE KIT**

HK-1 10FT OWC 12, 18, 24
HK-2 25FT OWC 12, 18, 24
HK-5 40FT OWC 12, 18, 24
HK-3 10FT OWC 36, 60
HK-4 25FT OWC 36, 60
HK-6 40FT OWC 36, 60
ACCESSORIES

DISCHARGE AIR NOZZLE KIT ASSEMBLY

The optional discharge nozzle kits are used to direct the conditioned air to a specific target area. By concentrating the airflow, the nozzles increase the air velocity towards production lines to cool personnel and/or equipment. In server rooms, the nozzles can be used to direct the airflow through the rack to remove the hot air from the area of the equipment.

**NK-1 for model OWC12**, with (2) 4-inch diameter nozzles with an approximate compressed length of 15 inches. The approximate extended length is 21 inches.

**NK-2 for models OWC18 and OWC24** with (2) 6-inch diameter nozzles with an approximate compressed length of 22 inches. The approximate extended length is 32 inches.

**2NK-3 for model OWC36 and OWC60**, with (2) 8-inch diameter nozzles with an approximate compressed length of 20 inches. The extended length is approximately 29 inches.

The nozzle kits come pre-assembled with the nozzles secured to a mounting plate, and with edge guards. By removing the OWC discharge grill, you can insert the nozzle kit into the opening without the use of tools.
ACCESSORIES

**EVAPORATOR RETURN AIR PLENUM**

Evaporator return air plenums are available for installations where it is required to duct air to the inlet of the evaporator. The evaporator return air plenums allow the user to connect round duct (flexible or rigid) to the return air intake to reduce air noise and increase the number of options for solving difficult cooling problems. The plenum attaches to the front of the unit, replacing the return air grille. Refer to the table below for configuration and application information.

**DEP—10** for OWC12 transitions the return air opening to a 10-inch round duct.

**DEP—12** for OWC18 and OWC24 transitions the return opening to a 12-inch round duct.

**DEP—16** for OWC36 and OWC60 transitions the return opening to a 16-inch round duct.

*NOTE—When a DEP is installed, it is recommended to set the evaporator blower speed to high, to avoid evaporator coil freeze-up.*

<table>
<thead>
<tr>
<th>Plenum Kit</th>
<th>OWC12</th>
<th>OWC18</th>
<th>OWC24</th>
<th>OWC36</th>
<th>OWC60</th>
<th>FILTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEP—10</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1) 10”X20”X1”</td>
</tr>
<tr>
<td>10 inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEP—12</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>(1) 16”X24”X1”</td>
</tr>
<tr>
<td>12 inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEP—16</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>(1) 10”X30”X1”</td>
</tr>
<tr>
<td>16 inch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1) 15”X30”X1”</td>
</tr>
<tr>
<td>Maximum Equivalent Feet</td>
<td>25</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Est. External Static Pressure</td>
<td>(.20)</td>
<td>(.25)</td>
<td>(.25)</td>
<td>(.25)</td>
<td>(.50)</td>
<td></td>
</tr>
</tbody>
</table>
ACCESSORIES

DISCHARGE DUCT ADAPTER

Discharge duct adapters are available for applications where ducted evaporator discharge is required. The adapters can be easily installed on the unit without fasteners, and be installed for either vertical or horizontal ducting. The standard discharge grille is removed and the DDA is attached in the grille opening.

DDA-6 for OWC12, converts the evaporator discharge to a 6-inch diameter round duct.

DDA-10 for OWC18 and OWC24, converts the evaporator discharge to a 10-inch diameter round duct.

2DDA-16 for OWC36 and OWC60, converts the evaporator discharge to a 16-inch round duct.

When used in conjunction with the evaporator return air plenum, DEP, the unit can provide closed-loop cooling to and from a given space without the influence of any outside air.

NOTE—When a DDA is installed, it is recommended to set the evaporator blower speed to high, to avoid evaporator coil freeze-up.

<table>
<thead>
<tr>
<th>Adapter Model</th>
<th>Round Duct Size</th>
<th>OWC12</th>
<th>OWC18</th>
<th>OWC24</th>
<th>OWC36</th>
<th>OWC60</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDA-6</td>
<td>6-inch</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DDA-10</td>
<td>10-inch</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2DDA-16</td>
<td>16-inch</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Maximum Approx. Equivalent Feet</td>
<td></td>
<td>25</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Maximum E.S.P</td>
<td></td>
<td>.15</td>
<td>.25</td>
<td>.25</td>
<td>.25</td>
<td>.50</td>
</tr>
</tbody>
</table>
ACCESSORIES

HOSE KIT

Hose kits are available in lengths of 10, 25, and 40 feet. Each hose kit allows for convenient installation of the OWC, while allowing for portability within the allowable space.

NOTICE—When using these hoses in applications with water pressures exceeding 50 PSIG, a water pressure reducing valve must be installed in the water supply line prior to the hose kit; otherwise warranty on the hose kits will be void.

All hose kits have FEMALE flare connectors to match the MALE flare fittings on the units (see chart below). The WATER IN connector consists of a 3/4” hose barb. WATER OUT and DRAIN (condensate) have no fittings, and can be fed to a sink or permanent drain. When using a hose kit, avoid sharp corners, hot water pipes and kinking to assure proper water flow of the supply, return, and drain lines.

<table>
<thead>
<tr>
<th>Hose Kit</th>
<th>Length</th>
<th>Flare Conn IN-OUT-DRAIN</th>
<th>OWC12</th>
<th>OWC18</th>
<th>OWC24</th>
<th>OWC36</th>
<th>OWC60</th>
</tr>
</thead>
<tbody>
<tr>
<td>HK-1</td>
<td>10 ft</td>
<td>3/8 3/8 3/8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HK-2</td>
<td>25 ft</td>
<td>3/8 3/8 3/8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HK-5</td>
<td>40 ft</td>
<td>3/8 3/8 3/8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HK-3</td>
<td>10 ft</td>
<td>5/8 5/8 3/8</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>HK-4</td>
<td>25 ft</td>
<td>5/8 5/8 3/8</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HK-6</td>
<td>40 ft</td>
<td>5/8 5/8 3/8</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Included with the hose kit is a sink/faucet adapter
SPECIAL ORDER ITEMS

In some applications, units can be manufactured with optional components for added performance and longevity. Below are a few of the OWC options that are available.

Consult your distributor for pricing and availability.

CUPRO-NICKEL CONDENSER
When chemically treated water, salt water or brine, is used in the condenser coil, it is recommended that the OWC be equipped with a 90/10 Cupro-Nickel condenser coil.

HIGH PRESSURE WATER VALVE
For applications where water supply pressures exceed 150 psig, a high pressure water regulating valve can be installed in the OWC. Valves designed for use with up to 350 psig water inlet pressure are available.

HERESITE TREATED EVAPORATOR COIL
For use in chemically corrosive environments, the OWC can be manufactured with a Heresite® coated evaporator coil for improved coil life.

HOT GAS BYPASS VALVE
In applications where low evaporator temperatures may occur, an optional hot gas bypass valve can be installed to regulate the evaporator temperature. The bypass valve feeds refrigerant (hot gas) into the evaporator to avoid low ambient freeze-ups.

MARITIME WATER VALVE
Cast naval bronze body with MONEL parts. MONEL is a “natural alloy” and is highly resistant to corrosion.

TOWER UNITS
In applications where the OWC is connected to a closed-loop condenser water circuit, a unit can be built for direct water connection WITHOUT a water valve.
INSTALLATION INSTRUCTIONS

RECEIVING—INSPECTION
Upon receiving your unit, inspect the packaging for any damage. All units are shipped on a skid, and packaged in a triple-wall carton for added protection.

BEFORE INSTALLING
Check the unit for any damage. All OceanAire products are thoroughly inspected at the factory and carefully packaged. If any damage is evident, contact OceanAire IMMEDIATELY.

ELECTRICAL REQUIREMENTS
Check the nameplate located on the back of the unit to confirm the proper power is available for the unit. Refer to "Specifications" section for voltage and amperage requirements. For proper NEMA receptacles, refer to "Electrical service plug configuration". When using extension cords, use the proper gauge cord, and check cord voltage to the unit.

TIME DELAY FUSES/CIRCUIT BREAKERS ARE RECOMMENDED

WARNING—OPERATING THE UNIT ON IMPROPER VOLTAGE WILL VOID THE WARRANTY

ACCESSORIES
Verify that all accessories are correct for the model, and are installed in accordance with all instructions.

START-UP
Install the unit in accordance with all local and state building codes, and install all accessories. Allow for a clearance around the unit for future maintenance and/or service. Level unit and lock casters, when available. Connect power and test the LCDI on the power cord (if available). Power up unit, via thermostat and check for proper operation. Refer to Thermostat Operation for more details.
When power is connected, the controller will display “888” momentarily, and then disappear. Press the POWER button, then press the TEMP SELECT button until the SET POINT is displayed. Adjust the SET POINT to the desired temperature, and the unit will cool as required.

The systems controls temperature within +/- 2°

POWER—Turns the unit on/off when power is supplied

MODE - Selects the mode of operation between Cool and Moisture Control.

COOL - The system will operate in cooling mode only.

MOISTURE CONTROL - The system operates in the cooling mode to reduce humidity within the conditioned space.

Every 4 hours, the fan is started, circulating the air, and the air temperature is recorded by the controller. The cooling cycle is started for one hour, or until the room temperature drops 2°, which ever comes first. This cycle repeats every four hours.
CONTROLLER PROGRAMMING MENU

1) Make sure the unit has power.

2) Press the power button "OFF".

3) Press the following buttons in sequence "S-U-D-S" (Select—Up arrow — Down arrow — Select)

4) The display will begin flashing P1 and a number.

If there is no display, repeat the sequence, making sure the unit has power, but is turned OFF.

5) To adjust any program feature, press the ARROW UP ▲ or ARROW DOWN ▼ button until the desired value is displayed.

6) Use the "MODE" button to scroll through the programmable settings P1 through P16.

7) If no buttons are pressed, the display will then return to the "OFF" position after about 50 seconds.

PROGRAM SETTINGS

P1—High Fan Speed Limit Setting, 56 - 85
P2—Low Fan Speed Limit Setting, 30 - 55
P4—Temperature Sensor Calibration, +/- 10°
P10—Temperature Display, °F or °C
P13—Supply Fan Operation, Cycling or Continuous
P15—Fan Motor Type Setting, PSC or Shaded Pole

P1, P2 - To adjust fan speed settings, P1 represents the high fan speed parameter, while P2 represents the low fan speed parameter. When using nozzle kits, discharge duct adapters and evaporator plenums, setting P1 to 85 will help to avoid freeze ups.

P4 - Adjust the P4 setting to match the actual INSIDE room temperature, if needed.

P10 - Use this parameter to display temperatures in the desired units.

P13 - To cycle the evaporator fan with the compressor, access code P-13. Press the up or down button to switch to “CYC”, which means cycle the fan with the compressor. The factory default setting is “CON”, which means continuous fan operation.

P15 - Fan Motors are PSC type, SC - should be selected.

8) Press POWER — you should see an alphanumeric code.

Press POWER and the unit will start at the new settings.
OWC PROGRAM SETTINGS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CODE SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OWC12</td>
<td>P1 = 85, P2 = 35</td>
</tr>
<tr>
<td>OWC18</td>
<td>P1 = 80, P2 = 50</td>
</tr>
<tr>
<td>OWC24</td>
<td>P1 = 70, P2 = 50</td>
</tr>
<tr>
<td>OWC36</td>
<td>P1 = 85, P2 = 40</td>
</tr>
<tr>
<td>OWC60</td>
<td>P1 = 85, P2 = 45</td>
</tr>
</tbody>
</table>

NOTICE

Program Parameters are NOT controller default values. They are OceanAire Factory Settings

DISPLAY FAULTS

LAC......... Low AC line power
AAA......... Failed Air Sensor (unit will not run)
CON......... Failed Condensate Pump/Over-Flow Alarm
High Pressure Cut-Out—Low/interrupted condenser water supply. Correct problem, and re-set unit at HP RESET

TO CHECK THE NUMBER OF HOURS ON THE UNIT

1) Disconnect unit power, and reconnect unit power.

2) When “888” appears in display, push and release the arrow down button

3) The first set of numbers displayed reads thousands of hours:
   02 = 2000, 04 = 4000 hours, 00 means less than 1000 hours.

4) The second set of numbers read hours directly:
   58 = 58 hours. 742 = 742 hours.

6) Add the 2 number sets together to get total hours. 03 and 486 = 3486 hours. 01 and 59 = 1059 hours.

   TOTAL HOURS REPRESENTS COMPRESSOR “RUN” TIME
WATER VALVE ADJUSTMENT

All OWC units come equipped with an automatic pressure regulated water valve which controls the condenser water flow rate. The water valve will open when the system is running, and will adjust the water flow rate based on the temperature of the supply water.

In some cases, water temperatures can cause the valve to open and close at a high rate, causing a “chattering” condition in the water supply line. In these cases, it is recommended that the water valve be adjusted.

1. Disconnect the unit power.
2. Remove the unit back panel and locate the water regulating valve in the lower right region of the unit.
3. Locate the water valve adjustment screw. At the top of the valve there is a square-shaped adjustment screw.
4. Turn the adjustment screw 1/4 turn CCW to raise the low side operating pressure...or...CW to lower the low side operating pressure.
5. Re-install the back panel and turn the unit on.
REPLACEMENT PARTS PROCEDURE

IT IS RECOMMENDED THAT ALL OCEANAIRE UNITS BE SERVICED BY A LICENSED TECHNICIAN

WARNING—TO AVOID INJURY, DISCONNECT UNIT POWER PRIOR TO SERVICING

A. FAN MOTOR
1. Remove cabinet left-side panel (when looking at the front of the unit).
2. Evaporator fan motor—disconnect evaporator motor wires from evaporator fan contactor and power module.
3. For all model sizes 12, 18, 24, and 36, remove the screws securing motor and inlet-ring to blower housing (all screws are external and visible), and remove blower wheel-motor assembly. Remove the blower wheel set screw and disassemble the blower wheel from the motor shaft and remove the motor.
   For model size 60—loosen blower wheel shaft set screw, and remove the screws securing the motor mount to the blower housing and remove motor and mount. Remove the motor from the motor mount.
4. Install the new motor, reversing the removal procedure.

B. ELECTRONIC CONTROLLER (THERMOSTAT)
   To replace cooling only thermostat, simply remove the (2) screws on the sides of the controller. Lift up the controller to unplug the display cable and remove. Plug display cable into new thermostat, and secure in place.

C. POWER MODULE
   To remove the power module, remove the rear control box cover. Disconnect wires (one at a time), and re-attach each wire, while holding replacement module in other hand. Once all wires have been reconnected in accordance with the wiring diagram, install new power module.

D. CONDENSATE PUMP
1. Remove left side panel.
2. Remove brackets securing condensate pump in base pan.
3. Disconnect pump wire leads at Molex connectors. Remove retainer clamp and tubing.
4. Replace pump, install by reversing procedure.

E. HIGH PRESSURE SAFETY SWITCH
1. Remove cabinet right side panel, or rear panel of Model 60.
2. Remove flare nut that secures capillary to the refrigeration system high pressure side. A schrader valve is located in the discharge port which allows removal without losing the refrigerant charge.
3. Remove two screws that secure high pressure switch.
4. Disconnect wire leads from compressor contactor and condensate pump safety switch.
5. Install new High Pressure Control, reversing the procedure.

To gain access to compressor and compressor run capacitor, remove left hand side panel.
TROUBLESHOOTING GUIDE

The following steps and procedures are recommended for correcting the problems indicated. In the event that the problem can not be corrected, service may be required.

SERVICE SHOULD BE PERFORMED BY A QUALIFIED AIR CONDITIONING SERVICE TECHNICIAN

PROBLEM: UNIT DOES NOT POWER UP
CAUSE: Power interruption
REMEDIY: Check LCDI (if equipped) and reset. Check external power supply making sure that the disconnect is ON. Check for blown fuses or tripped circuit breakers. Reset or replace (as needed).

PROBLEM: NO DISPLAY ON THERMOSTAT AFTER POWER “ON”
CAUSE: Loose display cable, faulty thermostat or faulty power module
REMEDIY: Check display cable, re-seat connectors. Thermostat may be defective...remove and replace. Power module may be defective...remove and replace.

PROBLEM: EVAPORATOR FAN RUNS BUT COMPRESSOR DOES NOT START
CAUSE: Thermostat — set point is too high.
REMEDIY: Make sure set-point is lower than room temperature. Look for a red dot to the right of the temperature displayed for cooling.

Note—there is a time delay for the compressor

CAUSE: Thermostat—Loose display cable
REMEDIY: Examine the thermostat for a loose cable connection. Re-seat the display cable.

CAUSE: Condensate Alarm—"CON" is displayed.
REMEDIY: Check condensate pump and make sure pump is working properly and that there is no kink in the drain line from the pump.

CAUSE: High Pressure Cut-Out—"CON" is displayed. Inadequate/turned off condenser water supply.

CAUSE: Low Voltage — “LAC” is displayed. Check power supply for voltage outside the range of 106-126 volts on the 115 Volt units and 187-253 Volts on the 208/230 Volt units.
REMEDIY: Have power checked by electrician and repaired.

CAUSE: Compressor relay failure.
REMEDIY: Replace power module.

CAUSE: Compressor Contactor failure (3 and 5-ton units)
REMEDIY: Replace compressor contactor.
PREVENTIVE MAINTENANCE

OWCs are designed to last a long time and to give maximum performance and reliability with minimum maintenance. To prolong the life of the unit, regular maintenance must be performed as specified below:

**BLOWER MOTOR**
The evaporator motor on all units have permanently lubricated bearings. No oiling is necessary.

**FILTER**
A clogged filter will cause the unit to operate at greatly reduced efficiencies. We recommend that the filter be inspected on a regular basis *(every six weeks or less)* depending on the environment. The evaporator filter is located behind the return air grille and can be easily removed and cleaned. The filter must be washed periodically as needed by placing it in a dishwasher or soaking in a solution of warm water and detergent for 10 minutes. Then rinsing clean with hot water and shaking excess moisture from filter.

**CONDENSATE PUMP**
Condensate pumps come standard on all OWC models. When servicing pump follow these steps;

1. Make certain that the unit is disconnected from the power source before attempting to service or remove any component.
2. Be sure the floats move freely. Clean as necessary.
3. Remove the pump housing and check for obstructions. Clean as needed.
4. Clean the housing with warm water and mild soap when mineral deposits are visible.
5. Check the inlet and outlet piping. Clean as necessary. Be sure there are no kinks in the lines that would inhibit flow.

**GENERAL**

When necessary maintenance steps outlined above are followed, the air conditioner will provide long and reliable service. The refrigeration and electrical circuits of the system should only be serviced by a fully qualified service technician.
PIPING SCHEMATIC

Water-Cooled Spot Cooler

SUCTION LINE

DISCHARGE LINE

FILTER/DRIER

ACCESS VALVES

COMPRESSOR

EVAPORATOR COIL

EVAPORATOR BLOWER

CAPILLARY TUBES

WATER OUT

HP RESET

CONDENSER COIL

WATER IN

WATER VALVE

DISCHARGE LINE

PIPING SCHEMATIC

Water-Cooled Spot Cooler
WATER-COOLED SPOT COOLER MODELS OWC1211, OWC1811
115V SINGLE-PHASE
OWC2412
208-230V SINGLE-PHASE

POWER MODULE

COMPRESSOR

EVAP FAN MOTOR

COND PUMP

CONDENSATE SAFETY SWITCH

LOW VOLTAGE
HIGH VOLTAGE

WIRING SCHEMATIC FOR OWC1211, 1811 and 2412

WATER-COOLED SPOT COOLER MODELS OWC1211, OWC1811
115V SINGLE-PHASE
OWC2412
208-230V SINGLE-PHASE
WIRING SCHEMATIC FOR OWC3612

WATER-COOLED SPOT COOLER
MODEL OWC3612
208-230 V/ SINGLE-PHASE

POWER MODULE

DISCHARGE TEMP SENSOR
CONDENSATE SAFETY SWITCH
HP RESET SWITCH

OCEANAIRE

COOLING ONLY DISPLAY

208-230V Single-Phase COMPRESSOR

RUN CAP
COMP CONTACTOR

30 V COIL

T1 T2 L1 L2

COMP COM PUMP PUMP L-2 VALVE L-1 AC L-2 AC L-1 FAN L-2 FAN L-1

OAT/H20
FREON

DISPLAY

COND PUMP

WATER-COOLED SPOT COOLER
MODEL OWC3612
208-230 V/ SINGLE-PHASE

Plug 6-20P
Receptacle
WIRING SCHEMATIC FOR OWC6012

POWER MODULE

COMP CONTACOR

COMP COMP RUN PUMP L-2 VALVE L-1 AC L-1 AC L-2 FAN L-2 FAN L-1

DISPLAY OAT/H2O FREON

DISCHARGE TEMP SENSOR

COOLING ONLY DISPLAY

CONDENSATE SAFETY SWITCH

HP RESET SWITCH

COND PUMP

RUN CAP

208-230V Single-Phase COMPRESSOR

RUN CAP

230 V COIL

T1 T2 L1 L2

Plug 6-30P

Receptacle

LOW VOLTAGE

HIGH VOLTAGE

WATER-COOLED SPOT COOLER
MODEL OWC6012
208-230 V/ SINGLE-PHASE

24
THREE PHASE MONITOR

Three-Phase units are equipped with monitors for motor protection. The OceanAire Three-phase Monitor safeguards the unit against incorrect compressor rotation, low-voltage and/or loss of power in any one of the power legs. The monitor is installed in the control box and is equipped with an LED for diagnosis of an improper electrical condition (see diagrams below). When power is connected, the compressor WILL NOT engage until the monitor start delay has timed out. If the thermostat does not power up, an electrical condition may need to be addressed. Remove the control box cover and observe the LED on the phase monitor. The LED signals the following:

GREEN-BLINKING - Start delay, 120 sec.

GREEN - Proper Operation

RED/GREEN-BLINKING - signals reverse phase rotation. Switch any two of the power leads for the unit, NOT THE MONITOR LEADS, and re-start.

RED-BLINKING - signals improper voltage and/or phase loss. Correct the power problem, then re-start the unit.

In the event of a power interruption, the unit will re-set to a start-up condition. The Phase Monitor will not allow the unit to start until power is corrected.

NOTICE
UNIT IS EQUIPPED WITH 3-PHASE POWER MONITOR (WITH LED)

LED INDICATION
GREEN (BLINKING) = START DELAY
GREEN = PROPER OPERATION
RED/GREEN (BLINKING) = PHASE REVERSAL
RED (BLINKING) = IMPROPER LEG VOLTAGE OR PHASE LOSS

START DELAY = 120 SECONDS

CONTROL BOX LABEL
WIRING SCHEMATIC FOR OWC6032

208-230V 3-Phase COMPRESSOR

POWER MODULE

WATER-COOLED SPOT COOLER
MODEL: OWC6032
208-230 V / 3-PHASE
WIRING SCHEMATIC FOR OWC3634 and 6034

POWER MODULE

WATER-COOLED SPOT COOLER MODELS OWC3634, OWC6034
460 V / 3-PHASE Plug L16-20P

COOLING ONLY DISPLAY

DISCHARGE TEMP SENSOR

HP RESET SWITCH

POWER MODULE

COMP CONTACCTOR

230 V COIL

THREE-PHASE MONITOR

EVAP FAN MOTOR

230 V COND PUMP

CONDENSATE SAFETY SWITCH

230 V

HIGH VOLTAGE TRANSFORMER

LOW VOLTAGE

HIGH VOLTAGE

WATER-COOLED SPOT COOLER MODELS OWC3634, OWC6034
460 V / 3-PHASE

Plug L16-20P
LIMITED WARRANTY
The Manufacturer (OceanAire, Inc.) warrants to the original owner that the Product will be free from defects in material or workmanship for a period not to exceed one (1) year from date of installation. If upon examination by the Manufacturer, the Product is shown to have a defect in material or workmanship during the warranty period, the Manufacturer will repair or replace, at its option, that part of the Product which is shown to be defective.

The Manufacturer further warrants that the product's compressor-motor will be free from defects in materials and workmanship for five (5) years from the date of installation.

If upon examination by the Manufacturer the Product is shown to have a defect in materials or workmanship during the warranty period, the Manufacturer will repair or replace, at its option, that Part of the Product which is shown to be defective. **Compressor warranty shall be pro-rated for years 2 – 5 at the sole discretion of OceanAire.** Electrical parts such as relays, overloads, capacitors, etc., and the sealed refrigeration system (condenser and evaporator) are included in the one year limited warranty, but not with the five year limited warranty of the compressor.

This limited warranty does not apply to:

a) Product that has been subjected to misuse or neglect, has been accidentally or intentionally damaged, has not been installed, maintained or operated in accordance with the furnished written instructions, or has been altered or modified in any way.

b) Product that has been subjected to any abnormal power conditions such as loss of power, power surges, voltage irregularities such as brown-outs or phase loss on three-phase equipment.

c) any expenses, including labor or material, incurred during removal or reinstalation of the Product.

d) any workmanship of the installer of the Product.

This limited warranty is conditional upon:

a) return to the Manufacturer, of the part of the Product thought to be defective.
   Goods can only be returned with prior written approval from the Manufacturer.
   All returns must be freight prepaid.

b) determination in the reasonable opinion of the Manufacturer, that there exists a defective in material or workmanship.

Repair or replacement of any part under this Limited Warranty shall not extend the duration of the warranty with respect to such repaired or replaced part beyond the stated warranty period.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, AND ALL SUCH OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS LIMITED WARRANTY. IN NO EVENT SHALL THE MANUFACTURER BE LIABLE IN ANY WAY FOR ANY CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES OF ANY NATURE WHATSOEVER, OR FOR ANY AMOUNTS IN EXCESS OF THE SELLING PRICE OF THE PRODUCT OR ANY PARTS THEREOF FOUND TO BE DEFECTIVE. THIS LIMITED WARRANTY GIVES THE ORIGINAL OWNER OF THE PRODUCT SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY BY EACH JURISDICTION.
END USER INFORMATION

MODEL: ________________________________

SERIAL NUMBER: _______________________

DATE PURCHASED: _____________________

INSTALLED BY: _________________________

DATE INSTALLED: _______________________

For Technical Support, or to locate a distributor for service parts, contact OceanAire at (847) 583-0311 or 1-866-GETAIRE (438-2473). Please indicate the Model Number and Serial Number of the unit to assure proper information and service parts.

TECH NOTES

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________