Drive Solstice Oxygen Concentrator

Instruction Guide

WARNING-Read instruction guide before operating this equipment.

DANGER---NO SMOKING

Drive Solstice Oxygen Concentrator
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INDICATIONS FOR USE — The Drive Solstice Oxygen Concentrator is intended for use as an oxygen concentrator to provide supplemental low flow oxygen therapy in the home, nursing homes, patient care facilities, etc.

WARNING

Under certain circumstances, oxygen therapy can be hazardous. Seeking medical advice before using an oxygen concentrator is advisable.

Physician Information
Physician Name: ____________________________
Telephone: _________________________________
Address: _________________________________

Prescription Information
Name: ____________________________
Oxygen liters per minute
    at rest: ___________ during activity: ___________
    other: ___________

Oxygen use per day
Hours: ___________ Minutes: ___________
Comments: ____________________________

Drive Solstice Oxygen Concentrator Serial Number: ____________________________
(check one)
□ 5-Liter
□ ___________

Drive Provider Information
Set-Up Person: ____________________________
This instruction guide was reviewed with me and I have been instructed on the safe use and care of the Drive Solstice Oxygen Concentrator.
Signature: ____________________________ Date: ___________
IMPORTANT SAFEGUARDS

Read this entire guide before using your Drive Solstice Oxygen Concentrator. Important information is highlighted by these terms throughout this guide:

DANGER Urgent safety information for hazards that will cause serious injury or death.

WARNING Important safety information for hazards that might cause serious injury.

CAUTION Information for preventing damage to the product.

NOTE Information to which you should pay special attention.

Important safeguards are indicated throughout this guide; pay special attention to all safety Information.

DANGER-NO SMOKING

SAVE THESE INSTRUCTIONS.

INTRODUCTION

This instruction guide will acquaint you with the Drive Solstice oxygen concentrator. Make sure that you read and understand this guide before operating your unit. Important safeguards are indicated throughout this guide; pay special attention to all safety information. Contact your Drive equipment provider should you have any questions.

WARNING

For your safety, the oxygen concentrator must be used according to the prescription determined by your physician.

DANGER

Oxygen causes rapid burning. Do not smoke while your oxygen concentrator is operating, or when you are near a person utilizing oxygen therapy. Do not use within 5 feet (1.6m) of hot, sparking objects or naked sources of flame.
Why Your Physician Prescribed Supplemental Oxygen

Today, many people suffer from heart, Lung, and other respiratory diseases. Many of these people can benefit from supplemental oxygen therapy. Your body requires a steady supply of oxygen to function properly. Your physician prescribed supplemental oxygen for you because you are not getting enough oxygen from room air alone. Supplemental oxygen will increase the amount of oxygen that your body receives. Supplemental oxygen is not addictive. Your physician prescribed a specific oxygen flow to improve symptoms such as headaches, drowsiness, confusion, fatigue, or increased irritability. If these symptoms persist after you begin your supplemental oxygen program, consult your physician.

How Your Drive Solstice Oxygen Concentrator works

Oxygen concentrators are the most reliable, efficient, and convenient source of supplemental oxygen available today, the oxygen concentrator is electrically operated. The unit separates oxygen from room air which allows high-purity supplemental oxygen to be delivered to you through the oxygen outlet, although the concentrator filters the oxygen in a room, it will not affect the normal amount of oxygen in your room.

IMPORTANT PARTS OF YOUR CONCENTRATOR

Please take time to familiarize yourself with your Drive Solstice oxygen concentrator before operating.

Checklist for Unpacking—Before using this product, make sure you have the following items:
- 1 User manual.
- 1 Oxygen concentrator set.
- 1 Adapter— for connect Humidifier. 
- 1 Oxygen Outlet Connector

Front View (Figure 1)
1. Operating instructions
2. Green Power light—illuminates when your concentrator is operating
3. Power Switch
   I =ON
   O=OFF
4. Flow meter knob
5. Flow meter
6. Circuit breaker— (selected units) resets the unit after electrical overload shutdown.
7. Oxygen outlet—oxygen is dispersed through this port.
8. Monitor—indicate the condition of system pressure status; oxygen purity status and indicate electric hour meter
9. Red Service Required light—when illuminated contact your're medical provider.

Back View (Figure 2)
10. Important Safeguards
11. Exhaust
12. Power cord and /or IEC power connector.
13. Air filter—prevents dirt, dust, and lint from entering your unit.

![Figure 1 Front View](image)

![Figure 2 Back View](image)

### SETTING UP YOUR OXYGEN CONCENTRATOR

1. Position your unit near an electrical outlet in the room where you spend most of your time.

   **DANGER**
   
   Keep the oxygen concentrator at least 5 feet (1.6 m) from hot, sparking objects or naked sources of flame.

   **NOTE**—Do not connect to an electrical outlet controlled by a wall switch. NO other appliances should be plugged into the wall outlet.
2. Position your unit at least 6 inches (16 cm) from walls, draperies, or any other objects that might prevent the proper flow of air in and out of your oxygen concentrator. The Oxygen concentrator should be located so as to avoid pollutants or fumes.
BEFORE OPERATING YOUR OXYGEN CONCENTRATOR

1. Before operating your unit always check to be sure the air filter (located on the back of your unit) is clean. Proper cleaning of this filter is discussed in the Caring for Your Concentrator section on page 10.

2. Attach the appropriate oxygen accessories to the oxygen outlet.

   **Oxygen Tubing Connection:**
   a. Thread the oxygen outlet connector onto the oxygen outlet.
   b. Attach the oxygen tubing directly to the connector. (Figure 3)

   ![Figure 3](image)

   **Oxygen Tubing Connection with Humidification:**
   If your physician has prescribed an oxygen humidifier as part of therapy, follow these steps:
   a. Fill the humidifier bottle with distilled water. Do not overfill.
   b. Thread the wing nut located on the top of the humidifier bottle to the oxygen outlet so that it is suspended (Figure 4). Make sure it is securely tightened.
   c. Attach the oxygen tubing directly to the humidifier bottle outlet fitting. (Figure 5)

   Your physician has prescribed either a nasal cannula, catheter, or face mask, in most cases, they are already attached to the oxygen tubing. If not, follow the manufacture's instructions for attachment.

   ![Figure 4](image) ![Figure 5](image)
3. Remove the power cord completely from the line cord strap. Make sure the power switch is in the “Off” position, and insert the plug into the wall outlet; the unit is double insulated to guard against electric shock.

**WARNING**

Improper use of the power cord and plugs can cause a burn, fire or other electric shock hazards. Do not use the unit if the power cord is damaged.

### OPERATING YOUR DRIVE SOLSTICE CONCENTRATOR

**DANGER**

Oxygen causes rapid burning. Do not smoke while your oxygen concentrator is operating, or when you are near a person utilizing oxygen therapy. Keep the oxygen concentrator at least 5 feet (1.6 m) from hot, sparking objects or naked sources of flame.

1. Press the power switch to the “On” position, when the unit is turned on, the Power light will illuminate, and the patient alert system – service Required light and audible signal — will briefly alarm.

**NOTE**—If the Service Required light illuminates and the audible signal alarms but the unit is not operating, there is no power to the unit, Refer to the Minor Troubleshooting chart on page 8 and contact your medical provider if necessary.

**NOTE**—If an audible low-frequency vibration sound is detected, the unit is not operating properly. Refer to the Minor Troubleshooting chart on page 8, and contact your Drive provider if necessary.

2. Check the flow meter to make sure that the flow meter ball is centered on the line next to the prescribed number of your flow rate.

**CAUTION**—It is very important to follow your oxygen prescription. Do not increase or decrease the flow of oxygen—consult your physician.

**NOTE**—Your medical provider may have preset the flow meter so that it cannot be adjusted.

**NOTE**—If the flow meter knob is turned clockwise, the flow decreases (and eventually will shut off the oxygen flow). If the knob is turned counterclockwise, the flow increases.
RESERVE OXYGEN SYSTEM

As a precaution, you’re medical provider may supply you with a reserve oxygen system. If your unit loses electrical power or fails to operate correctly, the patient Alarm System will sound to signal you to switch to your reserve oxygen system (if provided) and contact you’re medical provider.

CARING FOR YOUR DRIVE OXYGEN CONCENTRATOR

Not—Use no lubricants, oils or grease.

WARNING

Before attempting any cleaning procedures, turn the unit “off.”

Oxygen Humidifier (reusable bottles)
If your physician has prescribed humidification, clean your humidifier bottle daily. Follow the instructions Supplied by the manufacturer. If no cleaning instructions were supplied, follow these steps:
1. Wash the humidifier in a solution of hot water and dishwashing detergent.
2. Soak the humidifier in a solution of one part white vinegar to three parts hot water for 30 minutes. This solution acts as a germicidal agent.
3. Rinse thoroughly with warm tap water and refill with distilled water for use. Do not overfill.

Cannula, Mask, and Tubing
Clean and replace the cannula, mask, and tubing as instructed by your Drive Medical provider.

Air Filter and Oxygen Outlet Connector
The air filter and connector should be cleaned at least once a week. To clean, follow these steps:
1. Remove the air filter, located on the back of the unit. Remove the oxygen outlet connector (if used).
2. Wash in a solution of warm water and dishwashing detergent.
3. Rinse thoroughly with warm tap water and towel dry. The filter should be completely dry before reinstalling.

CAUTION—To prevent product damage, do not attempt to operate the unit without the air filter or while the filter is still damp.

Exterior Cabinet

WARNING

To avoid electric shock, do not remove the concentrator cabinet. The cabinet should only be removed by a qualified medical technician. Do not apply liquid directly to the cabinet or utilize any petroleum-based solvents or cleaning agents.

Clean the concentrator exterior cabinet by using a damp cloth or sponge with a mild house-hold cleaner and wipe it dry.
Accessories
The accessories below are approved for use with the Drive Solstice Oxygen Concentrator:

- Bubble Humidifier (200 ml Capacity)
- Cannula (disposable)
- Cannula w/ 2.1m (7 ft) Oxygen Tubing (disposable)
- Oxygen Outlet Connector
- Oxygen Tubing (disposable)

**NOTE**- The use of certain humidifiers and accessories not specified above may impair the oxygen concentrator’s performance.

**NOTE**- If the Service Required light illuminates and the audible signal alarms but the unit is not operating, there is no power to the unit. Refer to the Minor Troubleshooting chart on page 12 and contact your medical provider.

The OCI device is a device within your concentrator that monitors the oxygen produced by your unit. When the unit is turned “ON,” all four light (Power, Low Oxygen, Normal Oxygen, and Service Required) on the front panel will illuminate briefly. After a few minutes (approx. 3 mins), only the Power and Normal Oxygen lights will remain lit.

The lights on the front panel are defined as follows:

- Green Normal Oxygen light-acceptable oxygen level. (The LED will display “Normal Oxygen”)
- Yellow Low Oxygen light-below an acceptable oxygen level. (The LED will display “Low Oxygen”)

If the oxygen purity falls below the acceptable level, the green Normal Oxygen light will shut off and the yellow Low Oxygen light will illuminate. Switch to your reserve oxygen system. Refer to the Troubleshooting section in this guide on page 11 and contact your medical provider.

As an added safety feature should the oxygen purity continue to drop, an intermittent audible signal will sound. Contact your medical provider immediately. Do not attempt any other maintenance.
# MINOR TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Unit does not operate. Power light is off when the power switch is &quot;on&quot;. Audible alarm is pulsing and Service Required light is flashing.</td>
<td>1. Power cord not properly inserted into wall outlet.</td>
<td>Check power connection at the wall outlet. On 230 volt units, check the back of the unit.</td>
</tr>
<tr>
<td></td>
<td>2. No power at wall outlet.</td>
<td>Check your home circuit breaker and reset if necessary. Use a different wall outlet if the situation occurs again.</td>
</tr>
<tr>
<td></td>
<td>3. Oxygen concentrator circuit breaker activated (selected units).</td>
<td>Press the concentrator circuit breaker button (if equipped) located below the power switch. Use a different wall outlet if the situation occurs again.</td>
</tr>
<tr>
<td>B. Unit operates; the Power light is on when the Power switch is &quot;On&quot;. Red Service Required light is illuminated. Audible alarm may be sounding.</td>
<td>1. Air filter is blocked.</td>
<td>Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 7.</td>
</tr>
<tr>
<td></td>
<td>2. Exhaust is blocked.</td>
<td>Check the exhaust area; make sure there is nothing restricting the unit exhaust.</td>
</tr>
<tr>
<td></td>
<td>3. Blocked or defective cannula, catheter, face mask or oxygen tubing.</td>
<td>Detach cannula, catheter, or face mask. If proper flow is restored, clean or replace if necessary. Disconnect the oxygen tubing at the oxygen outlet. If proper flow is restored, check oxygen tubing for obstructions or kinks. Replace if necessary.</td>
</tr>
<tr>
<td></td>
<td>4. Blocked or defective humidifier bottle.</td>
<td>Detach the humidifier from the oxygen outlet. If proper flow is obtained, clean or replace humidifier.</td>
</tr>
<tr>
<td>C. Unit operates the power light is on when power switch is &quot;on&quot;, audible low-frequency vibration sound is detected.</td>
<td>5. Flow meter set too low.</td>
<td>Set flow meter to prescribed flow rate. If the above remedies do not work, contact your homecare provider</td>
</tr>
<tr>
<td>D. If any other problems occur with your oxygen concentrator.</td>
<td></td>
<td>Turn your unit “off”. Switch to your reserve oxygen system, and contact your homecare provider immediately.</td>
</tr>
<tr>
<td>E. Yellow Low Oxygen light is on and the LCD shows “Low Oxygen” (Only for item 18050)</td>
<td>1. Flow meter is not properly set. 2. Air filter is blocked. 3. Exhaust is blocked.</td>
<td>1. Ensure the flow meter is properly set to the prescribed number. 2. Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 9. 3. Check the exhaust area; make sure there is nothing restricting the unit exhaust.</td>
</tr>
<tr>
<td>F. Red Service Required light is on and an intermittent audible signal is sounding.</td>
<td>1. Flow meter is not properly set.</td>
<td>Ensure the flow meter is properly set to the prescribed.</td>
</tr>
<tr>
<td></td>
<td>2. Air filter is blocked.</td>
<td>Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 7.</td>
</tr>
<tr>
<td></td>
<td>3. Exhaust is blocked.</td>
<td>Check the exhaust area; make sure there is nothing restricting the unit exhaust. If the above remedies do not work, contact your medical provider.</td>
</tr>
</tbody>
</table>
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Delivery Rate (Lower delivery rates available for low application)</td>
<td>1 to 5 LPM</td>
</tr>
<tr>
<td>2.</td>
<td>Outlet Pressure</td>
<td>8.5 psi (58.6 kpa)</td>
</tr>
<tr>
<td>3.</td>
<td>Electrical Rating</td>
<td>115 V, 60 Hz, 2.6A (Max.)</td>
</tr>
<tr>
<td>4.</td>
<td>Oxygen Percentage</td>
<td>1~5 LPM 93%±2%</td>
</tr>
<tr>
<td>5.</td>
<td>Operating Environment Range</td>
<td>Temperature 40°F to 90°F (10°C to 35°C), Humidity 30% to 70%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Atmospheric pressure 7.3<del>15.4 psi (50</del>106 kpa)</td>
</tr>
<tr>
<td>6.</td>
<td>Weight</td>
<td>37lbs. (16.8 kilograms)</td>
</tr>
<tr>
<td>7.</td>
<td>Sound Level (ISO 8359:1996 from front)</td>
<td>45~47dbA (overall average)</td>
</tr>
<tr>
<td>8.</td>
<td>Dimensions</td>
<td>23” x 14” x 12” in (58.8 x 35.6 x 30.5 cm)</td>
</tr>
<tr>
<td>9.</td>
<td>Operating System</td>
<td>Time Cycle / Pressure Swing</td>
</tr>
<tr>
<td>10.</td>
<td>Storage Conditions</td>
<td>Temperature -40°F to 158°F (-40°C to 70°C), Humidity 10% to 100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Atmospheric pressure 7.3<del>15.4 psi (50</del>106 kpa)</td>
</tr>
<tr>
<td>11.</td>
<td>Equipment Class and Type</td>
<td>The type of protect against electric shock: Class II</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The degree of protect against electric shock: TYPE B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Type B Applied part</td>
</tr>
<tr>
<td>12.</td>
<td>Warranty</td>
<td>5 years</td>
</tr>
</tbody>
</table>

### SYMBOL

- **General warning, caution, risk of danger**
  Please read the instructions carefully before operating the product.

- **Type B applied part**
  Note: B = Body

- **Class II equipment**

- **SN**
  Manufacture’s serial number
<table>
<thead>
<tr>
<th><strong>Authorized representative in the European community</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date of manufacture</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Manufacture</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE Directive) after over the valid term within 3 years, the machine should be treated on local law or regulation requirement. To avoid hurt users and pollute environment.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>The equipment bears CE mark CE0434 indicating its conformity with the provision of Council Directive 93/42/EEC concerning medical devices, and fulfills the essential requirement of Annex I of this directive.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>FRAGILE</strong>&lt;br&gt;Contents of the transport package are fragile therefore it shall be handled with care.</td>
<td></td>
</tr>
<tr>
<td><strong>THIS WAY UP</strong>&lt;br&gt;Indicates correct upright position of the transport package.</td>
<td></td>
</tr>
<tr>
<td><strong>KEEP AWAY FROM RAIN</strong>&lt;br&gt;Transport package shall be kept away from rain.</td>
<td></td>
</tr>
</tbody>
</table>
LIMITED WARRANTY:

This warranty is extended only to the original purchaser who purchases this product when new and unused from Drive Medical or a provider. This warranty is not extended to any other person or entity and it is not transferable or assignable to any subsequent purchaser or owner. Coverage under this warranty will end upon any such subsequent sale or other transfer of title to any other person. This warranty gives you specific legal rights and you may also have other legal rights which may vary from state to state. Drive Medical warrants its Oxygen Concentrators when purchased new and unused to be free from defects in materials and workmanship for a period of five years from date of purchase from Drive Medical or a provider, with a copy of the seller’s invoice required for coverage under this warranty. This will void any and all warranty applicable to the valve body. If within such warranty periods any such product shall be proven to Drive Medical’s satisfaction to be defective, such product shall be repaired or replaced, at Drive Medical’s option. This warranty only applies to the labor for repairs performed by the Drive Service Department or Drive Authorized Service Centers. It does not apply to the labor performed by the purchaser or user. This warranty does not include normal wear and tear or shipping charges. Drive Medical’s sole obligation and your exclusive remedy under this warranty shall be limited to such repair or replacement. Routine maintenance items, such as filters, are excluded from this warranty. For warranty service, please contact Drive Medical’s Service Department at the toll free number on the back cover. DO NOT return products to our factory without prior consent. C.O.D. shipments will be refused; please prepay shipping charges.

Limitations and exclusions: the foregoing warranty shall not apply to products subjected to negligence, accident, improper operation, maintenance or storage, soot or smoke-filled environments, or other than normal application, use or service, or to products modified without the Drive corporation’s express written consent (including, but not limited to, modification through the use of unauthorized parts or attachments) or to products damaged by reason of repairs made to any component without the specific consent of Drive or to products damaged by circumstances beyond Drive’s control. The foregoing express warranty is exclusive and in lieu of any other warranties whatsoever, whether express or implied, including the implied warranties of merchantability and fitness for a particular purpose, and the sole remedy for violations of any warranty whatsoever, shall be limited to repair or replacement of the defective product pursuant to the terms contained herein. The application of any implied warranty whatsoever shall not extend beyond the duration of the express warranty provided herein. Drive shall not be liable for any consequential or incidental damages whatsoever. Some states do not allow the exclusion or limitation of incidental or consequential damage, or limitation of how long an implied warranty lasts, so the above exclusion and limitation may not apply to you. This warranty shall be extended to comply with state/provincial laws and requirements.
DECLARATION OF CONFORMITY

Manufacturer: Drive Medical Design & Manufacturing
ADDRESS: 99 Seaview Boulevard,
           Port Washington, NY 11050
Product Designation: Oxygen Concentrator
Catalog Number: 18050, 18055