DeVilbiss® HEALTHCARE

525 Series | 525 Serie | 525 Serisi | 525 طراز

Serie de 525 | Serie da 525 | Série 525

Série 525 | 525 Serie | Seria 525

0044

en DeVilbiss® 5-Liter Oxygen Concentrator Instruction Guide

WARNING–*Read instruction guide before operating this equipment.*

ASSEMBLED IN USA

NO SMOKING ℞ ONLY

es Guía de instrucciones del concentrador de oxígeno de 5-litros de DeVilbiss®

ADVERTENCIA–*Lea la guía de instrucciones antes de poner a funcionar este equipo.*

ENSAMBLADO EN EE. UU.

NO FUMAR ℞ ONLY

fr Guide d'instructions du concentrateur d'oxygène 5-litres DeVilbiss®

AVERTISSEMENT–*Lire le mode d'emploi avant d'utiliser ce dispositif.*

ASSEMBLÉ AUX ÉTATS-UNIS

NE PAS FUMER ℞ ONLY

de DeVilbiss® 5-Liter-Sauerstoffkonzentrator Bedienungsanleitung

WARNUNG–*Vor Inbetriebnahme des Gerätes Bedienungshinweise lesen.*

HERGESTELLT IN DEN USA

RAUCHEN VERBOTEN ℞ ONLY

it Concentratore di ossigeno da 5-litri DeVilbiss® Istruzioni per l'uso

AVVERTENZA–*Leggere il manuale di istruzioni prima di usare l'apparecchio*

ASSEMBLATO NEGLI U.S.A.

NON FUMARE ℞ ONLY

nl Instructiehandleiding DeVilbiss® 5-liter zuurstofconcentrator

WAARSCHUWING–*Lees dit instructiehandboekje zorgvuldig door voordat u het apparaat gaat gebruiken.*

GEMONTEERD IN DE VERENIGDE STATEN

VERBODEN TE ROKEN ℞ ONLY

tr DeVilbiss® 5-Litre Oksijen Konsantratörü Kullanım Kılavuzu

UYARI–*Cihazı kullanmaya başlamadan önce bu kılavuzu okuyunuz.*

ABD'DE MONTE EDILMIŞTIR

SİGARA İÇİLMEZ ℞ ONLY

pt Manual de instruções do Concentrador de oxigênio DeVilbiss® de 5-litros

ADVERTÊNCIA– *Leia o manual de instruções antes de operar este equipamento.*

MONTADOS NOS EUA

PROIBIDO FUMAR ℞ ONLY

pl Instrukcja obsługi 5-litrowego koncentratora tlenu DeVilbiss®

OSTRZEŻENIE – *Przeczytaj instrukcję obsługi przed rozpoczęciem korzystania z tego urządzenia.*

ZMONTOWANO W STANACH ZJEDNOCZONYCH

ZAKAZ PALENIA ℞ ONLY

ar دليل الإرشادات الخاص بوحدة تركيز الأكسجين من DeVilbiss® سعة 5 لتر

تنبيه - اقرأ دليل الإرشادات قبل تشغيل الجهاز

تم تجميعه في الولايات المتحدة الأمريكية

℞ ONLY **ممنوع التدخين**

ENGLISH en-2
ESPAÑOL es-15
FRANÇAIS fr-29
DEUTSCH de-43
ITALIANO it-57
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WARNING
Under certain circumstances, oxygen therapy can be hazardous. Seek medical advice before using an oxygen concentrator.

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: _____

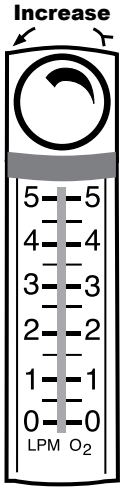
DeVilbiss 5-Liter Oxygen Concentrator w/OSD Serial Number: _____

DeVilbiss Equipment 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 DeVilbiss Oxygen Concentrator.

Signature: _____ Date: _____



DeVilbiss 5-Liter Series

SYMBOL DEFINITIONS

	It is mandatory to read and understand the operating instructions prior to use. ⓘ This symbol has a blue background on the product label.	O I	OFF ON	LOT	LOT Number		Manufacturer
	Electric Shock Hazard. Cabinet to be removed by authorized personnel only. ⓘ This symbol has a yellow background on the product label.		Reset	REF	Catalog Number	EC REP	European Representative
	Danger - No smoking near patient or device. ⓘ This symbol has a red circle and diagonal bar on the product label.		Alternating Current	SN	Serial Number	CE 0044	European CE mark
	Use no Oil, Grease or Lubricants ⓘ This symbol has a red circle and diagonal bar on the product label.		Type B applied part	MD	Medical Device		Keep unit dry.
	Do not use near heat or open flames ⓘ This symbol has a red circle and diagonal bar on the product label.		Double Insulated	$\surd O_2$	Normal Oxygen	≤ 5 LPM	Maximum recommended flow rate: 5LPM
	General Warning ⓘ This symbol is used throughout this manual to indicate hazardous situations to avoid.		Hour Meter	$\downarrow O_2$	Low Oxygen		
	Important Information ⓘ This symbol is used throughout this manual to indicate important information you should know.	+5°C +35°C	Operating Temperature Range +5 to +35˚C (+41 to +95˚F)		Service Required		
	Note and Information Symbol ⓘ This symbol is used throughout this manual to indicate notes, useful tips, recommendations and information.	616 hPa 1010 hPa	Atmospheric Pressure Range 616 to 1010 hPa (Approximate sea level to 13123 ft)		TUV Rheinland C-US approval mark	Segurança	Inmetro approval mark
Rx ONLY	**CAUTION:** Federal (U.S.A.) law restricts this device to sale by or on the order of a physician.				TUV Rheinland Certified approval mark		
	This device contains electrical and/or electronic equipment that must be recycled per EU Directive 2012/19/EU- Waste Electrical and Electronic Equipment (WEEE)			IP21	Ingress Protection - Protected against finger access to hazardous parts; protected against vertically falling water drops.		

IMPORTANT SAFEGUARDS

Read this entire guide before using your DeVilbiss concentrator. Important safeguards are indicated throughout this guide. Pay special attention to all safety information. Imminently and potentially hazardous information is highlighted by these terms:

DANGER
Indicates an imminently hazardous situation which could result in death or serious injury to the user or operator if not avoided.

WARNING
Indicates a potentially hazardous situation which could result in death or serious injury to the user or operator if not avoided.

CAUTION
Indicates a potentially hazardous situation which could result in property damage, injury, or device damage if not avoided.

IMPORTANT
Indicates important information you should know.

NOTE
Indicates notes, useful tips, recommendations, and information.

READ ALL INSTRUCTIONS BEFORE USING.

DANGER

- NO SMOKING signs should be prominently displayed.
- Oxygen causes rapid burning. Do not smoke while your oxygen concentrator is operating, or when you are near a person utilizing oxygen therapy.
- Smoking during oxygen therapy is dangerous and is likely to result in facial burns or death. Do not allow smoking within the same room where the oxygen concentrator or any oxygen carrying accessories are located.
    - If you intend to smoke, you must always turn the oxygen concentrator OFF, remove the cannula and leave the room where either the cannula or mask or the oxygen concentrator is located. If unable to leave the room, you must wait 10 minutes after you have turned OFF the oxygen concentrator before smoking.
- Oxygen makes it easier for a fire to start and spread. Do not leave the nasal cannula or mask on bed coverings or chair cushions if the oxygen concentrator is turned ON but not in use. The oxygen will make the materials flammable. Turn the oxygen concentrator OFF when not in use to prevent oxygen enrichment.
- Keep the oxygen concentrator and cannula at least 2 m (6.5 feet) from hot, sparking objects or naked sources of flame.
- Open flames during oxygen therapy are dangerous and are likely to result in fire or death. Do not allow open flames within 2 m (6.5 feet) of the oxygen concentrator or any oxygen carrying accessories.
- DeVilbiss oxygen concentrators are equipped with a fire mitigating outlet fitting that prevents propagation of fire into the unit.

WARNING

- To avoid electric shock, do not plug the concentrator into an AC outlet if the concentrator cabinet is broken. Do not remove the concentrator cabinet. The cabinet should only be removed by a qualified DeVilbiss technician. Do not apply liquid directly to the cabinet or utilize any petroleum-based solvents or cleaning agents.
- 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.
- Ensure the mains power cord is fully inserted into the concentrator connector (230 volt units) and the power cord plug is completely inserted into a fully functioning AC wall outlet. Failure to do so may cause an electrical safety hazard.
- The accessories (nasal cannula, masks, oxygen tubing, humidifiers, etc.) that supply oxygen to the patient must be equipped with a means that, in case of fire, stops the propagation of fire through the accessory for the safety of the patient and others. A fire activated flow-stop or thermal fuse device, if available, should be used with the oxygen supply accessories. These types of flow-stop devices stop the flow of oxygen to the patient in the event of fire. This means of fire protection should be located as close to the patient as practicable.
- Locate oxygen tubing and power supply cords to prevent tripping hazards and reduce the possibility of entanglement or strangulation.
- Do not lubricate fittings, connections, tubing or other accessories of the oxygen concentrator to avoid the risk of fire and burns.
- Do NOT use lubricants, oils or grease.
- Before attempting any cleaning procedures, turn the unit “OFF.”
- Use only water-based lotions or salves that are oxygen-compatible before and during oxygen therapy. Never use petroleum or oil-based lotions or salves to avoid the risk of fire and burns.
- Use only spare parts recommended by the manufacturer to ensure proper function and to avoid the risk of fire and burns.
- When using the Transfiller Caddy with a Transfill device, always keep the system on a flat surface. Disassemble the system prior to moving.

WARNING

- If you feel discomfort or are experiencing a medical emergency while undergoing oxygen therapy, seek medical assistance immediately to avoid harm.
- Geriatric, pediatric or any other patient unable to communicate discomfort can require additional monitoring and/or a distributed alarm system to convey the information about the discomfort and/or the medical urgency to the responsible caregiver to avoid harm.
- Use of this device at an altitude above 13,123 feet (4000 meters) or above a temperature of 95°F (35°C) or greater than 93% relative humidity may affect the flow rate and the percentage of oxygen and consequently the quality of the therapy. Refer to specifications for details regarding parameters tested.
- To ensure you receive the therapeutic amount of oxygen delivery according to your medical condition, the Oxygen Concentrator must:
    - be used only after one or more settings have been individually determined or prescribed for you at your specific activity levels.
    - be used with the specific combination of parts and accessories that are in line with the specification of the concentrator manufacturer and that were used while your settings were determined.
- Your delivery settings of the oxygen concentrator should be periodically reassessed for the effectiveness of therapy.
- For your safety, the oxygen concentrator must be used according to the prescription determined by your physician.
- Under certain circumstances, oxygen therapy can be hazardous. Seek medical advice before using an oxygen concentrator.

WARNING

MR Unsafe

- Do not bring the device or accessories into a Magnetic Resonance (MR) environment as it may cause unacceptable risk to the patient or damage to the oxygen concentrator or MR medical devices. The device and accessories have not been evaluated for safety in an MR environment.
- Do not use the device or accessories in an environment with electromagnetic equipment such as CT scanners, Diathermy, RFID and electromagnetic security systems (metal detectors) as it may cause unacceptable risk to the patient or damage to the oxygen concentrator. Some electromagnetic sources may not be apparent, if you notice any unexplained changes in the performance of this device, if it is making unusual or harsh sounds, disconnect the power cord and discontinue use. Contact your home care provider.
- This device is suitable for use in home and healthcare environments except for near active HF SURGICAL EQUIPMENT and the RF shielded room of an ME SYSTEM for magnetic resonance imaging, where the intensity of Electromagnetic DISTURBANCES is high.
- Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the oxygen concentrator, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

WARNING

Risk of injury or damage

- When the device is operated at the extremes of the environmental operating specifications (i.e., maximum temperatures and humidity), and in a single fault condition, which is a single component or performance malfunction, such as a blocked exhaust vent, blocked air intake, or an internal cooling fan failure, the temperature of the air coming out of the exhaust vents, located on the bottom left and bottom right sides of the unit can reach temperatures capable of causing a burn injury (see stated temperature and contact time values in the model specific tables below).
- Keep exposed body parts, such as hands and feet, a minimum of 46 inches (1.2 meters) away from the exhaust vents to avoid the risk of burns. Single fault conditions may result in visual and audible alerts and alarms.

  NOTE – *Under normal and single fault conditions, the concentrator releases warm air out the bottom of the unit (exhaust vents) which may discolor temperature sensitive flooring surfaces. The concentrator should not be used over flooring that is sensitive to heat staining. The Manufacturer is not responsible for flooring that becomes discolored.*
- Operate the unit in a cool, dry area with good ventilation, located on a hard surface, avoid thick rugs or carpeting. NEVER block the air intake or exhaust vents. Keep the unit a minimum of 12 inches (30.5 cm) away from any wall, draperies, or any other objects that might prevent the proper flow of air in and out of your oxygen concentrator. Proper air flow is needed to prevent overheating of the oxygen concentrator. DO NOT place the concentrator near any heat source such as hot air registers or heaters. Overheating of the oxygen concentrator may lead to low oxygen output and a risk of burns .
- The oxygen concentrator should be located in a well-ventilated area. DO NOT operate the unit in a closed or confined space, such as a closet, bathroom, etc. Avoid operating the device near smoke pollutants and fumes.
- Under extreme environmental conditions and a single fault condition occurs, the following device surface temperatures may exceed 106 °F (41 °C). *See Table 1 below for the model specific maximum temperature and safe contact guidance:*

Table 1 - 525DS Series

Description	Maximum Temperature 525DS Series °F	°C	Max safe contact time
Air coming from exhaust vents located on each side near the bottom of the unit	147.0	63.9	Less than 1 minute
Oxygen outlet fitting	120.7	49.3	Less than 10 minutes
Power Switch	119.0	48.3	Less than 10 minutes
LED Indicator panel	129.5	54.2	Less than 1 minute
Cannula at the outlet	109.1	42.8	Less than 10 minutes

Table 2 - 525KS Series

Description	Maximum Temperature 525KS Series °F	°C	Max safe contact time
Air coming from exhaust vents located on each side near the bottom of the unit	169.0	76.1	Less than 10 seconds
LED Indicator panel	110.5	43.6	Less than 10 minutes

Table 3 - 525PS Series

Description	Maximum Temperature 525PS Series °F	°C	Max safe contact time
Air coming from exhaust vents located on each side near the bottom of the unit	142.2	61.2	Less than 1 minute
Power Switch	106.7	41.5	Less than 10 minutes
LED Indicator panel	108.5	42.5	Less than 10 minutes

CAUTION

- Federal (U.S.A.) law restricts this device to sale by or on the order of a physician.
- It is very important to follow your oxygen prescription. Do not increase or decrease the flow of oxygen – consult your physician.
- Use of harsh chemicals (including alcohol) is not recommended. If bactericidal cleaning is required, a non-alcohol based product should be used to avoid inadvertent damage.

IMPORTANT

- It is recommended that the homecare provider lock the flow control knob to prevent inadvertent adjustment. A flow setting other than prescribed may affect the patient therapy.
- Do not service or clean this device while in use with a Patient.
- Installation of 515LF-607 low output flow meter package will cause the low flow alarm to not work and will prevent the device from meeting the requirements of ISO-80601-2-69:2014 Section 201.13.2.101.
- The Device is classified as IP21 which means it is protected against finger access to hazardous parts and protected against vertically falling water drops.
- Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
- This device contains electrical and/or electronic equipment. Follow local governing ordinances and recycling plans regarding disposal of device components.

SAVE THESE INSTRUCTIONS.

INTRODUCTION

This instruction guide will acquaint you with your DeVilbiss 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 DeVilbiss equipment provider should you have any questions.

Intended Use

The DeVilbiss 5 Liter Oxygen Concentrator intended use is to provide supplemental low flow oxygen therapy for patients suffering from COPD, cardiovascular disease, and lung disorders. The oxygen concentrator is used in home type environments, homes, nursing homes, patient care facilities, etc.

Indications For Use

The DeVilbiss 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.

Contraindications

The device is not intended to be life supporting or life sustaining.

The DeVilbiss 5 Liter Oxygen Concentrator may be contraindicated in patients at risk of experiencing serious adverse health consequences resulting from a temporary loss of function. Please consult with your prescribing physician if you believe you may be at risk.

Essential Performance

Essential Performance of the Oxygen Concentrator is to deliver a continuous flow of oxygen enriched gas. Visual and audible alarms indicate if the device is not meeting specification or a failure has been detected.

Service Life

The expected service life of the 525 series oxygen concentrator, which includes the performance of any required service or maintenance, is 5 years. The expected service life is based on the operation of the device in accordance with all manufacturer guidance for safe use, maintenance, servicing, storage, shipping, handling, and general operation.

The actual service life of the unit, and in particular the service life of certain subcomponents, including the Filters, Sieve Beds and Compressor Cup Seals, will vary based on a number of variables, including the operating environment, storage environment, shipping, handling, performance of preventive maintenance, and both the frequency and intensity of use.

The 525 series oxygen concentrators have internal sensors and diagnostic systems designed to monitor the system performance, including the oxygen concentration (purity), flow and temperature. The 525 concentrators will alert the user when the device requires maintenance or service. Please see the Troubleshooting and Maintenance Sections for more detailed information.

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.

The oxygen delivery setting has to be determined for each patient individually with the configuration of the equipment to be used, including accessories.

The proper placement and positioning of the prongs of the nasal cannula in the nose is critical to the amount of oxygen delivered to the respiratory system of the patient.

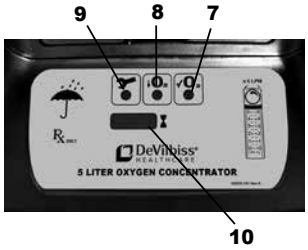
Your Delivery settings of the oxygen concentrator should be periodically reassessed for the effectiveness of therapy.

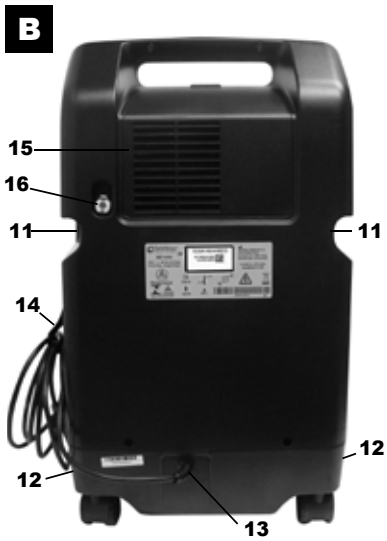
How Your DeVilbiss Oxygen Concentrator Works

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 DeVilbiss oxygen concentrator before operating.





Front View (Figure A)

1. Operating instructions (LED indicator panel)
2. Power Switch
   | = ON
   O = OFF
3. Flow meter knob
4. Flow meter
5. Circuit breaker – resets the unit after electrical overload shutdown
6. Oxygen outlet fitting – oxygen is dispersed through this port
7. Normal Oxygen (green) light (see page 9)
8. Low Oxygen (yellow) light (see page 9)
9. Red Service Required (red) light – when illuminated contact your DeVilbiss provider
10. Hour meter

Back View (Figure B)

11. Handgrip
12. Exhaust Vents

WARNING
When the device is used under extreme operating or single fault conditions, the exhaust air near the exhaust vents on the bottom of the unit may exceed 41˚. Keep exposed body parts, such as hands and feet, a minimum of 46 inches (1.2 meters) away from the exhaust vents to avoid the risk of burns.

13. Power cord and/or IEC power connector
14. Line cord strap
15. Filter Door with venting and compartment for optional gross particle filter
16. Auxiliary Oxygen Port (Serial numbers starting with R, N, or B): Your concentrator is equipped with an auxiliary oxygen port that can be used to fill oxygen cylinders with an FDA-cleared cylinder filling device that is designed to use oxygen from a concentrator to fill a cylinder. The port is only for use with FDA-cleared filling devices with compatible oxygen input specifications. Refer to the cylinder filling device instruction guide for the oxygen input/output specifications, connection and operating instructions.

Accessories

Transfiller Caddy ..... DeVilbiss 525DD-650

Bubble Humidifier ..... Salter Labs 7600 or equivalent

There are many types of humidifiers, oxygen tubing and cannulas/masks that can be used with this device. Certain humidifiers and accessories may impair the device's performance. A mask or any nasal cannula can be used with continuous flow delivery and may be sized according to your prescription as recommended by your homecare provider who should also give you advice on the proper usage, maintenance and cleaning.

WARNING
The accessories (nasal cannula, masks, oxygen tubing, humidifiers, etc.) that supply oxygen to the patient must be equipped with a means that, in case of fire, stops the propagation of fire through the accessory for the safety of the patient and others. A fire activated flow-stop or thermal fuse device, if available, should be used with the oxygen supply accessories. These types of flow-stop devices stop the flow of oxygen to the patient in the event of fire. This means of fire protection should be located as close to the patient as practicable.

WARNING
When using the Transfiller Caddy with a Transfill device, always keep the system on a flat surface. Disassemble the system prior to moving.

NOTE – *The bubble humidifier should be supplied with a permanent fire stop device. If a bubble humidifier needs to be used without a permanent fire stop device, a secondary fire stop device must be used and placed as close to the humidifier as possible. Failing to do so could increase the risk of fire. Country Standards may vary. Please contact your provider for information.*

NOTE – *A maximum of 50 feet (15 meters) of crush-proof oxygen tubing, plus 7 feet (2.1 meters) of cannula, plus a bubble humidifier is allowed between the concentrator and the patient.*

NOTE – ***The oxygen supply accessory (patient tubing) shall be equipped with a means that, in case of fire, stops the delivery of oxygen to the patient. This means of protection should be located as close to the patient as practicable. Country Standards may vary. Please contact your provider for information.***

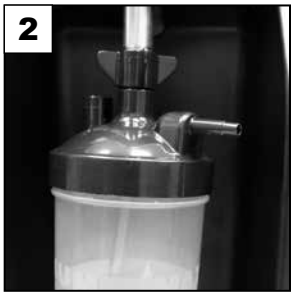
NOTE – *Your healthcare provider should verify the compatibility of the oxygen concentrator and all of the parts used to connect to the patient before use.*

SETTING UP YOUR OXYGEN CONCENTRATOR

1. Position your unit near an electrical outlet in the room where you spend most of your time.
   NOTE – *Do not connect to an electrical outlet controlled by a wall switch.*

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 and cannula at least 2 m (6.5 feet) from hot, sparking objects or naked sources of flame.

2. Position your unit on a flat surface 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 in a well-ventilated area to avoid pollutants or fumes.
   NOTE – *To move the unit, firmly grasp the handle located on the top of the unit, rolling and/or lifting the unit over pathway obstacles.*
3. Before operating your unit, always check to be sure the filter door vents (located on the back of your unit) are clean. Proper cleaning is discussed in the Caring For Your Concentrator section on page 9.
4. Attach the appropriate oxygen accessories to the oxygen outlet.



   Oxygen Tubing Connection:
   a. Thread the supplied oxygen outlet connector onto the oxygen outlet.
   b. Attach the oxygen tubing directly to the connector (Figure 1).

   Oxygen Tubing Connection With Humidification:
   If your physician has prescribed an oxygen humidifier as part of your therapy, follow these steps (If using a prefill, go to step b.):
   a. Fill the humidifier bottle as per manufacturer's instructions.
   b. Thread the wing nut located on the top of the humidifier bottle to the oxygen outlet so that it is suspended (Figure 2). Make sure it is securely tightened.
   c. Attach the oxygen tubing directly to the humidifier bottle outlet fitting (Figure 3).

NOTE – *Your physician has prescribed either a nasal cannula or face mask. In most cases, they are already attached to the oxygen tubing. If not, follow the manufacturer's instructions for attachment.*

NOTE – *Your healthcare provider should verify the compatibility of the oxygen concentrator and all of the parts used to connect to the patient before use.*

5. 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
Ensure the mains power cord is fully inserted into the concentrator connector (230 volt units) and the power cord plug is completely inserted into a fully functioning AC wall outlet. Failure to do so may cause an electrical safety hazard.

NOTE – *(only 115 volt units) The plug on the DeVilbiss oxygen concentrator has one blade wider than the other. To reduce the risk of electric shock, this plug is intended to fit in a wall outlet only one way. Do not attempt to defeat this safety feature.*

NOTE – *To check your oxygen concentrator and accessories for proper operation; 1. Check the output flow by placing the end of the nasal cannula under the surface of a half-full cup of water and look for the bubbles. 2. Check the system for leaks by bending the nasal prongs over and squeeze tight to stop the flow of oxygen. Look at the flow meter to see that the indicator ball on the flow meter drops to zero. If the indicator ball does not drop to zero, check all connections for possible leaks. Parts to check for leaks are: tubing connections, humidifier bottle and other accessories like firebreaks. Repeat these steps until the flow meter ball drops to zero. Contact your provider or service supplier immediately if you encounter any problems.*

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 DEVILBISS OXYGEN 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 and cannula at least 2 m (6.5 feet) from hot, sparking objects or naked sources of flame.
- DeVilbiss oxygen concentrators are equipped with a fire mitigating outlet fitting that prevents propagation of fire into the unit.

NO SMOKING

CAUTION
When the unit is turned "ON", as part of the normal start-up process, all three lights (Service Required, Low Oxygen and Normal Oxygen) on the front panel should illuminate and the audible alarm should sound. If ANY of the lights on the front panel DO NOT illuminate or the audible alarm DOES NOT sound, this indicates the alert system is not functioning properly. Refer to the Troubleshooting chart on page 10 and contact your DeVilbiss oxygen provider if necessary

WARNING
In order to prevent a fire propagating from the patient through the cannula towards the unit, a means of protection should be located as close to the patient as practicable. Please contact your provider for this means of protection.

1. Press the power switch to the "ON" position. When the unit is turned "ON," all three lights (Service Required, Low Oxygen and Normal Oxygen) on the front panel will illuminate briefly and an audible signal will briefly alarm confirming that the LEDs and audible signal are functioning properly. The unit will then operate in "start up" mode with the Low Oxygen light lit until a normal oxygen level is achieved, at which time the Normal Oxygen light will remain lit. The "start up" may take up to 15 minutes.
   NOTE– *DeVilbiss recommends for optimal service life that the DeVilbiss Oxygen Concentrator be operated for at least 30 minutes after it is powered ON. Shorter periods of operation, operating in extreme temperature/humidity conditions or in the presence of contaminates, and/or handling and storage conditions outside those specified, may affect the long term reliable operation of the product.*

DANGER
Oxygen makes it easier for a fire to start and spread. Do not leave the nasal cannula or mask on bed coverings or chair cushions if the oxygen concentrator is turned ON but not in use, the oxygen will make the materials flammable. Turn the oxygen concentrator OFF when not in use to prevent oxygen enrichment.

NOTE – *If the audible signal alarms but the unit is not operating, there is no power to the unit. Refer to the Troubleshooting chart on page 10, and contact your DeVilbiss provider if necessary.*

NOTE – *If an audible low-frequency vibration sound is detected, the unit is not operating properly. Refer to the Troubleshooting chart on page 10, and contact your DeVilbiss 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 DeVilbiss 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.*

NOTE – *For prescriptions of 5 LPM, be sure the ball is centered on the 5 liter line. The ball should not touch the red line. Setting the flow higher than 5 may cause the oxygen purity level to drop.*

NOTE – *The low-flow alarm may activate if the flow meter ball is set at or below 0.2 lpm. The unit will continue to run; however, the Service Required light will come on accompanied by an audible alarm. Adjust the flow meter to your prescribed flow.*

3. Your DeVilbiss concentrator is now ready for use, properly position the cannula with the nasal prongs facing upward, insert the prongs into nose. Wrap the cannula tubing over the ears and position in front of body (Figure 4). Allow 15 minutes for the oxygen concentrator to reach stated performance.

DeVilbiss OSD® Operation

The OSD (Oxygen Sensing Device) is a device within your concentrator that monitors the oxygen produced by your unit.

The OSD lights on the top panel are defined as follows:

- Green Normal Oxygen light–acceptable oxygen level.
- Yellow Low Oxygen light– below an acceptable oxygen level.

If the oxygen purity falls below the acceptable level: The green Normal Oxygen light will shut off, the yellow Low Oxygen light will illuminate, and an intermittent audible signal will sound.

Refer to the Troubleshooting section in this guide on page 10, and switch to your reserve oxygen system. Do not attempt any other maintenance. Contact your DeVilbiss provider immediately.

RESERVE OXYGEN SYSTEM

As a precaution, your DeVilbiss provider may supply you with a reserve oxygen system. If your unit loses electrical power or fails to operate correctly, the Patient Alert System will sound to signal you to switch to your reserve oxygen system (if provided) and contact your DeVilbiss provider. Please contact your oxygen provider if you have questions regarding a reserve oxygen system.

CARING FOR YOUR DEVILBISS OXYGEN CONCENTRATOR

DeVilbiss recommends using only original DeVilbiss parts and filters in order to guarantee reliable operation of the product.

WARNING
- Do NOT use lubricants, oils or grease.
- Before attempting any cleaning procedures, turn the unit "OFF."

Cannula/Mask, Tubing and Humidifier Bottle

Clean and replace the cannula/mask, tubing and humidifier bottle according to the manufacturer's instructions.

Filter Door with Vents

Inspect the vents periodically, and wipe with a dry cloth as needed to remove dust.

Exterior Cabinet

Clean the concentrator exterior cabinet weekly by using a damp cloth and wiping dry; the vents can also be wiped with a damp cloth.

Cleaning

	Recommended cleaning interval	Number of cleaning cycles *	Compatible cleaning method
Outer Cabinet	7 days	260	Water, use only a damp cloth
Filter Door Vents	7 days	260	Wipe with dry cloth, or a cloth dampened with water to remove dust.
Oxygen Outlet Connector	7 days	104	Mild dish soap (2 tbsp) and warm water (2 cups)

* number of cleaning cycles determined by recommended cleaning interval and expected service life

WARNING
To avoid electric shock, do not plug the concentrator into an AC outlet if the concentrator cabinet is broken. Do not remove the concentrator cabinet. The cabinet should only be removed by a qualified DeVilbiss technician. Do not apply liquid directly to the cabinet or utilize any petroleum-based solvents or cleaning agents.

CAUTION
Use of harsh chemicals (including alcohol) is not recommended. If bactericidal cleaning is required, a non-alcohol based product should be used to avoid inadvertent damage.

TROUBLESHOOTING

The following troubleshooting chart will help you analyze and correct minor oxygen concentrator malfunctions. If the suggested procedures do not help, switch to your reserve oxygen system and call your DeVilbiss homecare provider. Do not attempt any other maintenance.

WARNING

To avoid electric shock, do not plug the concentrator into an AC outlet if the concentrator cabinet is broken. Do not remove the concentrator cabinet. The cabinet should only be removed by a qualified DeVilbiss technician.

Troubleshooting Chart

SYMPTOM	POSSIBLE CAUSE	REMEDY
A. Unit does not operate. All lights are off when the power switch is "ON." Audible alert is pulsing.	1. Power cord not properly inserted into wall outlet.	1. Check power cord connection at the wall outlet. On 230 volt units, also check the mains connection on the back of the unit.
	2. No power at wall outlet.	2. Check your home circuit breaker and reset if necessary. Use a different wall outlet if the situation occurs again.
	3. Oxygen concentrator circuit breaker activated.	3. Press the concentrator circuit breaker reset button located below the power switch. Use a different wall outlet if the situation occurs again. If the above remedies do not work, contact your DeVilbiss provider.
B. Unit operates. Red Service Required light is illuminated. Audible alert may be sounding.	1. Filter door vents are blocked.	1. Check filter door vents and ensure that the openings are not blocked.
	2. Exhaust is blocked.	2. Check the exhaust area and make sure there is nothing restricting the unit exhaust.
	3. Blocked or defective cannula, face mask, or oxygen tubing.	3. Detach cannula 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.
	4. Blocked or defective humidifier bottle.	4. Detach the humidifier from the oxygen outlet. If proper flow is obtained, clean or replace humidifier.
	5. Flow meter set too low.	5. Set flow meter to prescribed flow rate. If the above remedies do not work, contact your DeVilbiss provider.
C. Unit operates. Audible low-frequency vibration sound is detected.	1. Electronic Assembly Malfunction.	1. Turn your unit "OFF." Switch to your reserve oxygen system and contact your DeVilbiss provider immediately.
D. Yellow Low Oxygen light is on.	1. Unit in "start up" mode.	1. Allow unit up to 15 minutes to complete start up period.
E. The yellow Low Oxygen light is on and the intermittent audible signal is sounding.	1. Flow meter is not properly set.	1. Ensure the flow meter is properly set to the prescribed number. (The maximum flow meter setting is 3 LPM when an oxygen bottle is being filled with oxygen from the auxiliary port.)
	2. Filter door vents are blocked.	2. Check filter door vents and ensure that the openings are not blocked.
	3. Exhaust is blocked.	3. Check the exhaust area and make sure there is nothing restricting the unit exhaust. If the above remedies do not work, contact your DeVilbiss provider.
F Red Service Required light is on and an intermittent audible signal is sounding.	1. Flow meter is not properly set.	1. Ensure the flow meter is properly set to the prescribed number. (The maximum flow meter setting is 3 LPM when an oxygen bottle is being filled with oxygen from the auxiliary port.)
	2. Filter door vents are blocked.	2. Check filter door vents and ensure that the openings are not blocked.
	3. Exhaust is blocked.	3. Check the exhaust area and make sure there is nothing restricting the unit exhaust. If the above remedies do not work, contact your DeVilbiss provider.
	4. Electronic Assembly Malfunction.	4. Turn your unit "OFF." Switch to your reserve oxygen system and contact your DeVilbiss provider immediately.
G. If any other problems occur with your oxygen concentrator.		1. Turn your unit "OFF." Switch to your reserve oxygen system and contact your DeVilbiss provider immediately.
H. Unit operates. Any of the visual and audible alerts do not function when the power switch is turned "ON."	1. Electronic assembly malfunction.	1 . Turn your unit "OFF." Switch to your reserve oxygen system and contact your DeVilbiss provider immediately.

OVERVIEW OF ALARMS AND SERVICE INDICATORS

This device contains an alarm system which monitors the state of the device and alerts of abnormal operation, loss of essential performance or failures. Alarm conditions are shown on the LED display. The alarm system functions are tested at power up by lighting all visual alarm indicators and sounding the audible alarm (beep).

All alarms are Low Priority Technical Alarms.

Alert or Alarm Condition	LED Icon	Details of Alert or Alarm Condition	Visual Alert or Alarm	Audible Alarm	Action
Start-up Period		The unit has recently been started and is in start-up period, the output flow of the oxygen is temporarily < 82%	The YELLOW LED light on the panel is illuminated indicating low O2 condition	No audible alarm during start-up period	Wait for unit to finish start-up period, up to 15 minutes
Low Oxygen Output Concentration		The output flow of oxygen is ≤ 82%, which indicates the unit may need routine servicing	The YELLOW LED Light on the panel is illuminated, indicating a Low O_2 condition	The audible alarm is beeping intermittingly	Contact your Oxygen Equipment Provider for assistance and to arrange for servicing of the unit
Device Malfunction		The device is experiencing a malfunction that requires servicing to correct	The RED Service Required LED light is illuminated	The audible alarm is beeping intermittingly	Contact your Oxygen Equipment Provider for assistance and to arrange for servicing of the unit

SPECIFICATIONS

DEVILBISS 5-LITER SERIES					
Catalog Number	**525DS, 525DS-Q**		**525KS, 525KS-LT**		**525PS**
Delivery Rate (Lower delivery rates available for low flow applications)***	0.5 to 5 LPM		0.5 to 5 LPM		0.5 to 5 LPM
Maximum Recommended Flow (@ nominal outlet pressures of zero & 7 kPa)**	5 LPM		5 LPM		5 LPM
Outlet Pressure	8.5 ± 0.5 psig (58.6 ± 3.5 kPa)		8.5 ± 0.5 psig (58.6 ± 3.5 kPa)		8.5 ± 0.5 psig (58.6 ± 3.5 kPa)
Auxiliary Oxygen Port **	Outlet Pressure: <15 psi Outlet Flow: 2 LPM		Outlet Pressure: <15 psi Outlet Flow: 2 LPM		Outlet Pressure: <15 psi Outlet Flow: 2 LPM
Electrical Rating	115 V, 60 Hz, 3.3 Amp		220-230 V~, 50 Hz, 1.55 Amp 230 V~, 60 Hz, 1.9 Amp		220-230 V~, 60 Hz, 1.68 Amp
Operating Voltage Range	97-127 V~, 60 Hz		187-253 V~, 50 Hz 195-253 V~, 60 Hz		187-253 V~, 60 Hz
Oxygen Percentage	1-5 LPM=87%-96%		1-5 LPM=93%±3%		1-5 LPM=93%±3%
Operating Atmospheric Pressure					
1010 hPa to 840 hPa 0-1500 M (0-4921 ft)	Across the voltage range: No degradation of performance		Across the voltage range: No degradation of performance		Across the voltage range: No degradation of performance
840 hPa to 616 hPa 1500-4000 M (4921-13123 ft)	Tested at nominal voltage only: No degradation of performance		Tested at 230V/50Hz only: No degradation of performance		Tested at 230V/60Hz only: No degradation of performance
Operating Temperature Range	41˚F (5˚C) to 95˚F (35˚C)		41˚F (5˚C) to 95˚F (35˚C)		41˚F (5˚C) to 95˚F (35˚C)
Operating Relative Humidity Range	15% to 93%, non-condensing		15% to 93%, non-condensing		15% to 93%, non-condensing
Power Consumption	310 Watts Average 275 Watts @ 1.2 LPM & below		230V / 50 Hz - 312 Watts Average 230V / 50 Hz - 296 Watts Average @ 1.2 LPM & below 230V / 60 Hz - 387 Watts Average 230V / 60 Hz - 369 Watts Average @ 1.2 LPM & below		230V / 60 Hz - 334 Watts Average 230V / 60 Hz - 297 Watts Average @ 1.2 LPM & below
Weight	36 lbs. (16.3 Kilograms)		36 lbs. (16.3 Kilograms)		36 lbs. (16.3 Kilograms)
Safe Working Load	53 lbs. (24 Kilograms)		53 lbs. (24 Kilograms)		53 lbs. (24 Kilograms)
Sound Pressure Level at 3 and 5 LPM (ISO 80601-2-69)	**525DS** 50.9 dBA @ 3 LPM 50.7 dBA @ 5 LPM	**525DS-Q** 46.7 dBA @ 3 LPM 46.7 dBA @ 5 LPM	**525KS** 47.9 dBA @ 3 LPM 47.9 dBA @ 5 LPM	**525KS-LT** 49.6 dBA @ 3 LPM 49.4 dBA @ 5 LPM	45.4 dBA @ 3 LPM 45.3 dBA @ 5 LPM
Sound Power Level at 3 and 5 LPM (ISO 80601-2-69)	**525DS** 54.7 dBA @ 3 LPM 54.5 dBA @ 5 LPM	**525DS-Q** 50.4 dBA @ 3 LPM 50.4 dBA @ 5 LPM	**525KS** 51.6 dBA @ 3 LPM 51.7 dBA @ 5 LPM	**525KS-LT** 53.4 dBA @ 3 LPM 53.2 dBA @ 5 LPM	49.2 dBA @ 3 LPM 49.1 dBA @ 5 LPM
Sound Level (ISO 8359:1996)	48 dBA (525DS) 46 dBA (525DS-Q)		40 dBA (50 Hz (525KS) 48 dBA (50 Hz (525KS-LT)		—
Alarm Sound Level	> = 62 dBA		> = 62 dBA		> = 62 dBA
Dimensions	24.5"H x 13.5"W x 12"D (62.2 x 34.2 x 30.4 cm)		24.5"H x 13.5"W x 12"D (62.2 x 34.2 x 30.4 cm)		24.5"H x 13.5"W x 12"D (62.2 x 34.2 x 30.4 cm)
Maximum Limited Pressure	Normal Condition: 9 PSIG (62.0 kPa), Single Fault Condition: 27.6 PSIG (190.3 kPa)		Normal Condition: 9 PSIG (62.0 kPa), Single Fault Condition: 27.6 PSIG (190.3 kPa)		Normal Condition: 9 PSIG (62.0 kPa), Single Fault Condition: 27.6 PSIG (190.3 kPa)
Operating System	Time Cycle / Pressure Swing		Time Cycle / Pressure Swing		Time Cycle / Pressure Swing
Low Oxygen Indicator	<82% low oxygen <60% very low oxygen		<82% low oxygen <60% very low oxygen		<82% low oxygen <60% very low oxygen
Storage Conditions	-13˚F (-25˚C) to 158˚F (70˚C), humidity range of 15% to 93% non-condensing		-13˚F (-25˚C) to 158˚F (70˚C), humidity range of 15% to 93% non-condensing		-13˚F (-25˚C) to 158˚F (70˚C), humidity range of 15% to 93% non-condensing
Equipment Class and Type	Class II Equipment Double Insulated; Type B Applied Part, IP21		Class II Equipment Double Insulated; Type B Applied Part, IP21		Class II Equipment Double Insulated; Type B Applied Part, IP21
Approval Body and Safety Standard	TUV ANSI/AAMI ES60601-1:2005+A2 (R2012) +A1 IEC 60601-1-6:2010 IEC 60601-1-11:2015 *** ISO 80601-2-69:2014 CAN/CSA-C22.2 No. 60601-1:14 CAN/CSA-C22.2 No. 60601-1-6:11 CAN/CSA-C22.2 No. 60601-1-11:15 CAN/CSA-C22.2 No. 80601-2-69:16		TUV approved for 50 Hz only to IEC 60601-1:2012 IEC 60601-1-6:2010+A1 IEC 60601-1-11:2015 EN ISO 80601-2-69:2014		TUV IEC 60601-1:2012 IEC 60601-1-6:2010+A1 IEC 60601-1-11:2015 EN ISO 80601-2-69:2014
CE mark	No		Yes		Yes
EMC Compliance To	EN60601-1-2		EN60601-1-2		EN60601-1-2

** **CAUTION** – The maximum recommended flow is 3 LPM when an oxygen bottle is being filled with oxygen from the auxiliary oxygen port.

*** **NOTE** – Use of the 515LF-607 low output flow meter package or other low output flow meter accessory will prevent the device from meeting the requirements of ISO-80601-2-69:2014 Section 201.13.2.101.

Specifications subject to change without notice.

Oxygen Concentration vs Flow Rate **(Across the listed voltage and environmental conditions.)**

525DS, 525DS-Q	
Flow L/m	**%O_2**
5	87% - 96%
4	87% - 96%
3	87% - 96%
2	87% - 96%
1	87% - 96%
.5	87% - 96%

525KS, 525KS-LT, 525PS	
Flow L/m	**%O_2**
5	90% - 96%
4	90% - 96%
3	90% - 96%
2	90% - 96%
1	90% - 96%
.5	90% - 96%

ELECTROMAGNETIC COMPATIBILITY INFORMATION

WARNING

MR Unsafe

- Do not bring the device or accessories into a Magnetic Resonance (MR) environment as it may cause unacceptable risk to the patient or damage to the oxygen concentrator or MR medical devices. The device and accessories have not been evaluated for safety in an MR environment.
- Do not use the device or accessories in an environment with electromagnetic equipment such as CT scanners, Diathermy, RFID and electromagnetic security systems (metal detectors) as it may cause unacceptable risk to the patient or damage to the oxygen concentrator. Some electromagnetic sources may not be apparent, if you notice any unexplained changes in the performance of this device, if it is making unusual or harsh sounds, disconnect the power cord and discontinue use. Contact your home care provider.
- This device is suitable for use in home and healthcare environments except for near active HF SURGICAL EQUIPMENT and the RF shielded room of an ME SYSTEM for magnetic resonance imaging, where the intensity of Electromagnetic DISTURBANCES is high.

WARNING

Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

WARNING

Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the oxygen concentrator, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

WARRANTY

DeVilbiss Healthcare warrants the DeVilbiss 5 Liter Oxygen Concentrator under the conditions and limitations stated below. DeVilbiss warrants this equipment to be free from defects in workmanship and materials for three (3) years from date of factory shipment to the original purchaser, (typically the healthcare provider) unless contractually specified otherwise. This warranty is limited to the Buyer of new equipment purchased directly from Drive DeVilbiss, or one of its Providers, Distributors, or Agents. DeVilbiss' obligation under this warranty is limited to product repair (parts and labor) at its factory or at an Authorized Service Center. Routine maintenance items, such as filters, are not covered under this warranty, nor does it cover normal wear and tear.

Warranty Claims Submissions

The original purchaser must submit any warranty claim to Drive DeVilbiss or to an Authorized Service Center. Upon verification of the warranty status, instructions will be issued. For all returns, the original purchaser must (1) properly package the unit in a DeVilbiss approved shipping container, (2) properly identify the claim with the Return Authorization Number, and (3) send the shipment freight prepaid. Service under this warranty must be performed by DeVilbiss and/or an Authorized Service Center.

NOTE – *This warranty does not obligate DeVilbiss to provide a loaner unit during the time that an oxygen concentrator is undergoing repair.*

NOTE – *Replacement components are warranted for the unexpired portion of the original Limited Warranty.*

This warranty shall be voided, and DeVilbiss shall be relieved of any obligation or liability if:

- The device has been misused, abused, tampered with, or used improperly during this period.
- Malfunction results from inadequate cleaning or failure to follow the instructions.
- The equipment is operated or maintained outside the parameters indicated in the DeVilbiss operating and service instructions.
- Unqualified service personnel conduct routine maintenance or servicing.
- Unauthorized parts or components (i.e., regenerated sieve material) are used to repair or alter the equipment.
- Unapproved filters are used with the unit.

THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THE EXPRESS LIMITED WARRANTY AND TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. THIS IS THE EXCLUSIVE REMEDY AND LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE LIMITATION OR EXCLUSION OF CONSEQUENTIAL OR INCIDENTAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

NOTE – *International warranties may vary.*

ORDERING AND RETURNING PARTS

DeVilbiss Customer Service Contact Information

Customer Service (USA): 800-338-1988
International Department: 814-443-4881 / DHCinternational@DeVilbissHC.com

Ordering Non-Warranty Replacement Parts

Order non-warranty parts and literature from your DeVilbiss provider.

RETURN AND DISPOSAL

This device may not be disposed of with household waste. After use of the device, please return the device to the provider for disposal. This device contains electrical and/or electronic components that must be recycled per EU Directive 2012/19/EU-Waste Electrical and Electronic Equipment (WEEE). Non-infectious used accessories (e.g. nasal cannula) can be disposed of as residential waste. The disposal of infectious accessories (e.g. nasal cannula from an infected user) must be made via an approved waste disposal company. Names and addresses can be obtained from the local municipality.

PROVIDER'S NOTES - Cleaning and Disinfection When There is a Patient Change

NOTE – *Recommendations for preventative maintenance at 3-year intervals are outlined in the Service and Maintenance Guidance below.*

DeVilbiss Healthcare recommends that at least the following procedures be carried out by the manufacturer or a qualified third party between uses by different patients.

NOTE – *If the following described complete processing of the concentrator by an appropriately trained individual is not possible, the device should not be used by another patient.*

NOTE – *If preventive maintenance is due at this time, these procedures should be carried out in addition to the servicing procedures.*

1. Use disinfectants safely. Always read the label and product information before use.
2. Always wear personal protective equipment when performing this procedure. Use suitable gloves and safety glasses. Cover exposed skin on arms to prevent accidental contact with bleach solution that has been applied to the concentrator.
3. Dispose of all accessories that are not suitable for reuse. This includes but may not be limited to the oxygen tubing, tubing connectors, nasal cannula and/or mask, oxygen outlet connector, and humidifier bottle.
4. Clean the exterior of the concentrator with a clean lint-free cloth. Heavy soil should be removed with a clean lint-free cloth dampened with water. A soft bristled brush dampened with water can be used to remove stubborn soil. Dry the concentrator using a clean lint-free cloth if water was used to remove soil.
5. Use 5.25% chlorine bleach (Clorox Regular Liquid Bleach or equivalent). Mix one (1) part bleach with four (4) parts water in an appropriate clean container. This ratio produces a one (1) part bleach to five (5) total parts solution (1:5). The total volume (amount) of solution required is determined by the number of concentrators in need of disinfection. **NOTE** – *An alternate suitable disinfecting agent (e.g. Mikrobac® forte or Terralin® Protect) may also be used. Follow disinfectant manufacturer's instructions.*
6. Apply the bleach solution in an even manner to the cabinet and power cord using a clean lint-free cloth. The cloth should be dampened only and not dripping of solution. Do not use a spray bottle to apply the solution. Do not saturate the device with the solution. Take care that no solution enters the vent areas on the concentrator base or the Auxiliary O2 fitting area on the back of the unit. Avoid over-saturating the cabinet seams so that no solution residue builds up in these areas. Avoid the caster wells located on the bottom of the unit.
7. Exposure time of the disinfectant solution should be 10 minutes minimum to 15 minutes maximum.
8. After the recommended exposure time, all surfaces of the concentrator should be wiped with a clean lint-free cloth dampened with drinking quality water no warmer than room temperature. Dry the unit with a dry, clean lint-free cloth. This is to remove residue that may stain or leave a film on the unit, especially after repeated disinfections.
9. Check the cord, the plug on the back of the device, the power switch, the fuse holder, and the indicator lights for possible damage. Replace all damaged or worn components.
10. Check the oxygen concentration. If the device is within specification, the extended life intake bacteria filter does not need to be replaced between patients. If the oxygen concentration is not within specification, the provider should refer to the service manual section on Troubleshooting.

NOTE – *There is no portion of the gas pathways through the concentrator that could be contaminated with body fluids under normal conditions.*

The device patient connection may unintentionally become contaminated with expired gases for a single fault condition i.e., a hose internal to the device becomes disconnected. This condition will cause no flow out of the device and/or an alarm condition. Should this occur, refer to the service manual for additional instructions.

Disinfection

NOTE – *The disinfection process can only be completed by the manufacturer or by an appropriately trained individual.*

	Recommended disinfection interval	Number of disinfection cycles	Compatible disinfection method
Cabinet, power cord	Between patients	20	1:5 chlorine bleach (5.25%) and water solution, Mikrobac forte, Terralin Protect
Oxygen tubing, tubing connectors, nasal cannula/mask, oxygen outlet connector, humidifier bottle	Do not clean, replace between patients	N/A	N/A

SERVICE AND MAINTENANCE GUIDANCE

Service and maintenance should only be performed by appropriately trained and authorized Drive DeVilbiss personnel and/or service centers.

DeVilbiss Oxygen Concentrator Preventive Maintenance/Service Guide							
Model	**Oxygen Purity Verification**	**Intake HEPA Filter**	**Internal Compressor Filter**	**Final HEPA Filter ****	**Cabinet Filter ***	**Sieve Beds ****	**Compressor Cup Seals ****
525 Series	Every 3-years or between patient uses, whichever comes first	Inspect between patient uses. Replace if needed	Inspect in conjunction with compressor service. Replace if needed	Inspect in conjunction with compressor service. Replace if needed	*For models with a cabinet gross particle filter, wash with each inspection. Replace if needed	When indicated by device performance below specification for oxygen purity, operating pressures and/or other indications of component wear	When indicated by device performance below specification for oxygen purity, operating pressures and/or other indications of component wear

** Some models of 525 series concentrator do not require a gross particle filter. This information is noted in the user manual.*

*** Sieve bed, compressor cup seal, compressor filter and final HEPA filter service should only be performed by appropriately trained and certified Drive DeVilbiss service centers.*

NOTE – *This is a suggested maintenance and service schedule for home oxygen providers. Individual maintenance requirements may vary based upon local operating conditions, regulations, or other circumstances.*

Initial Inspection

1. Upon receiving, examine the unit for external damage. If the unit appears to have external damage, please contact DeVilbiss for assistance.
2. Check to be sure the cabinet air filter (if applicable) and the intake filter are in place.
3. Plug the unit into an electrical outlet, turn the unit "ON" and check the audible/visual alarms. When the unit is turned ON, as part of the normal start-up process, all three lights (Service Required, Low Oxygen and Normal Oxygen) on the front panel should illuminate and the audible alarm should sound. If the ANY of the lights on the front panel DO NOT illuminate or the audible alarm DOES NOT sound, this indicates the alert system is not functioning properly. Refer to the Troubleshooting chart on page 10 or contact DeVilbiss for assistance.
4. Set the flow meter at the maximum recommended flow rate and allow the unit to run for 20 minutes. The internal oxygen sensor monitors the oxygen purity. If the oxygen is within specification, the **Green Normal Oxygen** light will be illuminated. If the **Yellow Low Oxygen** light is illuminated, refer to the Service Manual or contact DeVilbiss for assistance.
5. With unit still running, unplug to test the power fail alarm. If the power fail alarm does not provide an audible alert, refer to the Service Manual or contact DeVilbiss for assistance.

Oxygen Provider Preventive Maintenance Guidance

NOTE – *Scheduled maintenance should be performed in accordance with the Preventive Maintenance/Service Guide table above or Between Patient Uses.*

1. Discard all oxygen tubing, cannula/mask, oxygen outlet connector and humidifier bottle.
2. Replace cabinet air filter (when applicable) and follow the Cleaning and Disinfection Instructions in the IFU.
3. Clean the concentrator cabinet and inspect/replace filters in accordance with the table above.
4. Inspect all plugs, cords, and components. Replace any damaged or worn components.
5. Check oxygen concentration with a calibrated oxygen analyzer and record the oxygen percentage. If the concentration is not within specification, refer to troubleshooting section of the IFU or the Service Manual.
6. Record the unit hours of use.
7. Verify Audible Alert and Indicator Lights at each service at startup and while operating.
8. With unit still running, unplug to test the power fail alarm. If the power fail alarm does not provide an audible alert, refer to the Service Manual or contact DeVilbiss for assistance.