

#### Don't miss out on our upcoming Virtual Service Schools!

#### **CAIRE Service School Training Webinars 2021**

**CAIRE offers Virtual Service Schools covering both LOX and Concentrator lines.** 

Each class is a comprehensive program that focuses on the technical and service aspects of the CAIRE family products. Class time is divided between lecture and hands-on workshops. The seminars will help the student develop a better understanding of how liquid oxygen equipment or concentrators work, how to identify the symptoms and causes of potential problems and how to use the technical information that is available in the Technical Manuals. Registration for CAIRE's Service Schools is mandatory. Registration forms must be received two weeks prior to the start of the class in order to guarantee availability and materials.

Туре	Language	Location	Training Dates	Registration by
CONC	English	Ball Ground, GA USA	August 9-11	August 2
LOX	English	Ball Ground, GA USA	August 12	August 5
LOX	German	Langenfeld, Germany	September 15	September 1
LOX	Italian	Padova, Italy	October 19	October 5
LOX	English	Ball Ground, GA USA	November 11	October 28
CONC	English	Ball Ground, GA USA	November 8-10	October 25
CONC	English	Wokingham, UK	November 16-18	November 2

Table 1 - Details of upcoming training.

#### **Concentrator Service School Topics include:**

- Concentrator hazards and safety precautions
- Principles of pressure, flow and saturation
- Functions of the major components of a portable/stationary concentrator
- Theory of operation
- Set up and use of test equipment
- Troubleshooting, repair and performance verification/testing procedures

#### **LOX Service School Topics include:**

- Liquid oxygen (LOX) hazards and safety precautions
- Principles of pressure, flow and liquid oxygen saturation
- Functions of the major components of a liquid oxygen system
- HELiOS™ system theory of operation
- Reservoir and portable filling procedures
- Set up and use of test equipment

Please submit your registrations forms no later than the dates in Table 1 above. If you are interested in the service schools mentioned above, and it is passed the registration date please reach out to the registration emails below. Depending on safety and travel restrictions due to COVID-19, CAIRE may at any time change the location of the training from virtual to in-person.



#### To register for Service School, please email:

Techservice.global@caireinc.com for USA Training or jim.gibson@caireinc.com for European Training.

## **PRODUCT UPDATES**

#### **Companion 5 Flowmeters**

As of July, 2020, units produced for China and Europe will use the new flowmeter 21494452 to be compliant to IEC 60601-1 edition 3.1 and IEC 60601-1-2 4th edition. A new version of the Companion 5 concentrator is being released that is compliant to IEC 60601-1 edition 3.1 and IEC 60601-1-2 4th edition.

Units produced prior to July, 2020, use flowmeter 15063266. These changes do not apply to 120 V models of the Companion 5.

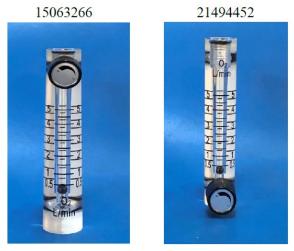


Figure 1. Two different flowmeter styles for the Companion 5

When replacing flowmeter, please refer to the table below for Companion 5 model by flowmeter type (as of October 14, 2020):

Model #	Description	Flowmeter	Compliant to IEC 60601?
21471908	Companion 5 Oxygen Concentrator 230	21494452	Yes
	VAC, 50 Hz		
21471909	Companion 5 Oxygen Concentrator with	21494452	Yes
	Bluetooth capability 230 VAC, 50 Hz		
21139079	Companion 5 Oxygen Concentrator 230	21494452	No
	VAC, 50 Hz (China) * This model used		
	1503266 up until 7/1/2020		
15067021	Companion 5 Oxygen Concentrator	21494452	No
	230 VAC, 50 Hz * This model used 1503266		
	<i>up until 7/1/2020</i>		



15067005	Companion 5 Oxygen Concentrator	15063266	No
	120 VAC, 60 Hz		
21190674	Companion 5 Oxygen Concentrator	15063266	No
	120 VAC, 60 Hz		
21225813	Companion 5 Oxygen Concentrator with	15063266	No
	Bluetooth capability		
	120 VAC, 60 Hz		

Please refer to Service Bulletin PN 21495524 for more details.

## **Helpful Hints & FAQs**

## Companion 5 Outlet Pressure Test Procedure (units with Flowmeter # 15063266)

- 1) Open up the unit.
- 2) Remove the cap from right side of the flow sensor.
- 3) Connect 5/32nd size tubing to the right side of the flow sensor (Picture 1).
- 4) Connect the other end of the tubing to a pressure analyzer.
- 5) Turn the power switch to the "ON" position.
- 6) Open flowmeter to 5 LPM.
- 7) Allow the unit to run for 10 minutes prior to testing the pressure.
- 8) Observe the reading on the pressure analyzer (Picture2).
- 9) Acceptable range is 4.3-4.9 psig. If the outlet pressure is not within this range, the product regulator needs to be adjusted. (see manual 14940837 for procedure)
- 10) Turn the power switch to the "OFF" position.
- 11) Remove tubing from flow sensor and replace the cap.



Picture 1. Flow Sensor



Picture 2. Pressure analyzer



#### Do I or should I send extra accessories with the Concentrator?

Depending on the specific unit you are shipping you may want to send extra cannulas, humidifier bottles and humidifier adapters. Below are some part numbers you can use to order extra accessories for your concentrator(s).

#### Cannulas



#### <u>Humidifier Bottle (Companion Series, Quiet Life, NewLife series & VisionAires only)</u>



The accessories sheet can be found in our website <a href="Mailto:CAIRE Knowledge Center">CAIRE Knowledge Center</a> or with the following link: <a href="http://files.caireinc.com/CutSheets-Lit/ML-CONC0096.pdf">http://files.caireinc.com/CutSheets-Lit/ML-CONC0096.pdf</a>

#### **Document Update**

We advise our valued customers to monitor and check that they are using the most recent revision of any documents for the model of equipment they have. The following documents have been updated.

- 20679338 Freestyle Parts List
- 20701012 VisionAire Part List
- 20702480 Freestyle 5 Parts List
- 20702481 Focus Parts List
- 20807701 NewLife Part List
- 21179808 Companion 5 Part List
- ML-LOX0014 Sprint Stroller cutsheet US English



- ML-LOX0014-1 Sprint Stroller cutsheet French
- ML-LOX0014-2 Sprint Stroller cutsheet German
- ML-LOX0014-3 Sprint Stroller cutsheet Spanish
- ML-LOX0014-5 Sprint Stroller cutsheet Italian
- ML-LOX0014-6 Sprint Stroller cutsheet Portuguese

#### **Med Tips Distribution!**

Need to update your Med Tips contact information or add a member of your team to our distribution list? Email us today with your new information!

**CONTACT:** For technical questions or concerns, contact Technical Service:

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techservice.global@caireinc.com Europe: +44 (0) 118 936 7060

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Please consult the applicable product instructions for use for product indications, contraindications, warnings, precautions, and detailed safety information.



# SERVICE BULLETIN

PN: 21495524

**RELEASE DATE:** October 14, 2020

**MODEL:** Companion 5<sup>TM</sup>

**ISSUE:** Companion 5<sup>TM</sup> Flowmeter Outlet Pressure Test

**NOTES:** CAIRE is using the new style Flowmeter 21494452 on the 3<sup>rd</sup> Edition

Companion 5 models. The previous style Companion 5 models will still use Flowmeter 15063266. A new version of the Companion 5 concentrator is being released that is compliant to IEC 60601-1 edition 3.1 and IEC

60601-1-2 4th edition.

Units produced as of July 2020 for China and Europe will use flowmeter 21494452 to be compliant to IEC 60601-1 edition 3.1 and IEC 60601-1-2 4th edition. Units produced prior to July 2020 use flowmeter 15063266. These changes do not apply to 120 V models of the Companion 5. **Reference Service Bulletin 21494864**.

Note: When replacing flowmeter reference table 1.



Figure 1. Two different flowmeter styles for the Companion 5

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#### **Outlet Pressure Test Procedure for Flowmeter 21494452:**

- 1) Turn the power switch to the "ON" position and set flow to 5 LPM, and allow the unit to run for 1 hour prior to testing the deadhead pressure.
- 2) Install 6ft (1.82 m) of tubing to the O2 outlet port.
- 3) Teeing the tubing off to a spare flowmeter to act as a needle valve and pressure analyzer.
- 4) Slowly turn down the spare flowmeter knob until it stops.
- 5) Observe the reading on the pressure analyzer.
- 6) Acceptable range is <6 psig.
  - a) Acceptable range for China is 4.14 5.06 psig. If the outlet pressure is not within this range, the product regulator needs to be adjusted. (see manual for procedure)
- 7) Turn the power switch to the "OFF" position.
- 8) Remove tubing from O2 outlet port

#### **Outlet Pressure Test Procedure for Flowmeter 15063266:**

- 1) Open up the unit.
- 2) Remove the black plug from the side of the flow sensor.
- 3) Connect 5/32nd size tubing to the side of the flow sensor.
- 4) Connect the other end of the tubing to a pressure analyzer.
- 5) Turn the power switch to the "ON" position.
- 6) Open flowmeter to 5 LPM.
- 7) Allow the unit to run for 10 minutes prior to testing the pressure.
- 8) Observe the reading on the pressure analyzer.
- 9) Acceptable range is 4.3 4.9 psig. If the outlet pressure is not within this range, the product regulator needs to be adjusted. (see manual for procedure)
- 10) Turn the power switch to the "OFF" position.
- 11) Remove tubing from O2 outlet port.

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Table 1. C5 Model by Flowmeter Type (as of October 14, 2020)

Model#	Description	Flowmeter	Complaint to IEC 60601?
21471908	Companion 5 Oxygen Concentrator 230 VAC, 50 Hz	21494452	Yes
21471909	Companion 5 Oxygen Concentrator with Bluetooth capability 230 VAC, 50 Hz	21494452	Yes
21139079	Companion 5 Oxygen Concentrator 230 VAC, 50 Hz (China) * This model used 1503266 up until 7/1/2020	21494452	No
15067021	Companion 5 Oxygen Concentrator 230 VAC, 50 Hz * This model used 1503266 up until 7/1/2020	21494452	No
15067005	Companion 5 Oxygen Concentrator 120 VAC, 60 Hz	15063266	No
21190674	Companion 5 Oxygen Concentrator 120 VAC, 60 Hz	15063266	No
21225813	Companion 5 Oxygen Concentrator with Bluetooth capability 120 VAC, 60 Hz	15063266	No

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