

December 2019 Med Tips

PRODUCT UPDATES

VisionAire Manifold - PVC Tube Replacement

CAIRE has updated the PVC tube fitted to the manifold on the VisionAire units for ease of servicing and to increase robustness of this connection. Tube item number 21424242 has replaced tube item numbers TU152-1 or TU152-070.





Figure 1. (Left) Old Tube PN TU152-1 or TU152-070 and (Right) New Tube PN 21424242

Please refer to Service Bulletin PN 21438402 for the replacement procedure.

Female QDV Lip Seal Change

Issued as a running update, all Portable Liquid Oxygen and Side Fill Reservoir Units will be manufactured with a standardized Quick Disconnect Valve (QDV) Lip Seal.

Previous models of the QDV Lip Seal contained either a silicone O-ring (P/N CA110104) or were manufactured with a steel rosette spring (P/N B-775260-00). Existing Stock of QDV's equipped with CA110104 will be diminished and B-775260-00 will be used on all Top and Side Fill Female QDVs.

The CA110104 and B-775260-00 Lip Seals are both forwards and backwards compatible, with the exception that all female Side Fill QDV built prior to 11 July 2016 should continue to use part CA110104. Any built after 11 July 2016 should use part B-775206-00. This is due to the side fill QDV requiring a small chamfer to enable the B-775260-00 to fit correctly, all Side Fill Female QDVs manufactured after 11 July 2016 have this chamfer.

This change was made as a standardization and to move towards a more robust design. Figure 2. below shows both Lip Seal versions. Pictured on the left is the Lip Seal with silicone O-Ring that will be phased out. The Lip Seal on the right will be standardized going forward.



Figure 2. Pictured Left is PN CA110104. Pictured Right is B-775260-00.

Please refer to Service Bulletin PN 20990410.

Helpful Hints & FAQs

FreeStyle® Comfort™ Battery Pack Duration Test

The below procedure should be used to test the performance of the FreeStyle Comfort battery pack. Be sure to only use a FreeStyle Comfort that is in good working condition for this test. If the device displays an alarm while in test mode, the unit will need service before being used to perform the battery pack test.

- 1. Remove the FreeStyle Comfort from any carrying bags, backpacks, or other accessory carrying cases.
- 2. Fully recharge the battery using either a FreeStyle Comfort connected to AC power or a desktop charger.
- Install the fully charged battery pack into a FreeStyle Comfort and remove any external power cords.
- 4. Turn the FreeStyle Comfort on and enter Test Mode by pressing +, +, -, -, +, on the keypad. The entire sequence needs to be entered within 5 seconds. If a mistake is made while entering this sequence, the user must wait 5 seconds before attempting the sequence again.
- 5. Once in test mode the flow can be increased or decreased as usual. The battery duration test can be done using any flow setting.
- 6. While in test mode the unit will pulse at a pre-programmed frequency of 20 breaths per minute.
- 7. Using a stopwatch or timer, record the time it takes for the FreeStyle Comfort to completely shut down.



8. Take the time recorded and compare it to the full capacity operating time of a new battery pack in the table below. If this time is less than 50% of the full capacity of a new battery pack, it is recommended that the battery pack be taken out of service. See table below:

FreeStyle Comfort Battery Duration							
Setting	New Single (8-cell) Battery Duration	Minimum Duration Time (50% of New Single Battery)	New Double (16- cell) Battery Duration	Minimum Duration Time (50% of New Double Battery)			
1	Up to 8 hours	4 hours (4:00)	16 hours	8 hours (8:00)			
2	Up to 4 hours	2 hours (2:00)	8 hours	4 hours (4:00)			
3	Up to 3 hours	1.5 hours (1:30)	6 hours	3 hours (3:00)			
4	Up to 2.25 hours	1.12 hours (1:07)	4.5 hours	2.25 hours (2:15)			
5	Up to 2 hours	1 hours (1:00)	4 hours	2 hours (2:00)			

NOTE: There are many factors that influence battery run time on FreeStyle Comfort:

- Ambient temperature
- Ambient pressure
- Compressor hours
- Device condition
- Battery age
- 9. To exit test mode, turn the device off or enter the test mode sequence a second time. Be sure to exit test mode before returning the unit to patient use.

FreeStyle Comfort batteries are designed to last 300 charge/discharge cycles: however, battery packs may perform to specifications past 300 charge/discharge cycles.

Please refer to Service Bulletin PN 21494318.

Freestyle Comfort Backpack

We are pleased to announce the availability of the new Backpack for the Freestyle Comfort Portable Oxygen Concentrator (POC). This can be ordered using part number MI459-1.



Figure 3. Freestyle Comfort Backpack MI459-1



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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: 21438402

RELEASE DATE: June 21, 2019

REVISION DATE(S): September 12, 2019 (rev B)

MODEL: VisionAire Oxygen Concentrator

ISSUE: PVC Manifold Tube Replacement

NOTES: CAIRE has updated the PVC manifold tube on the VisionAire units for

ease of servicing and to increase robustness of this connection. Tube item number 21424242 has replaced tube item numbers TU152-1 or TU152-070. The length of tubing that needs to be ordered is 178 mm per unit, or multiples of 178 mm according to the number of units that need to be repaired. Slightly more than the recommended length of tubing can

be ordered, as there may be slight variations between units.

The steps to performing this replacement are:

1. Make sure the power cord is disconnected. Remove front panel. Pull out the compressor enclosure as far possible.

2. Cut off the cable tie of the capacitor. Remove the capacitor and cable tie. Pull off the PVC tube (TU152-1 or TU 152-070). See figure 1.

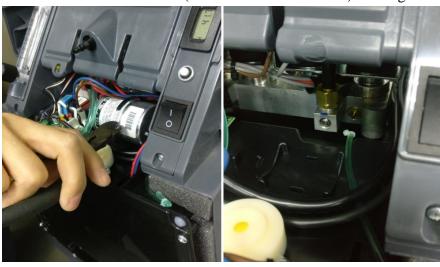


Figure 1

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3. Use long nose pliers to clip and install the cable tie TW011-2 and silicone tube 21424242. See figure 2.

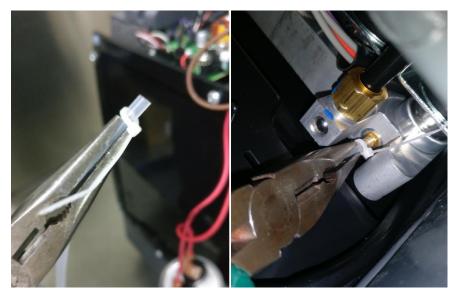


Figure 2

4. Use a screw driver to push the cable tie all the way to the brass fitting. Use long nose pliers to secure the cable tie. And then use a knife to cut off the cable tie. See figure 3.



Figure 3

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5. Use a screw driver to make sure the cable tie is set all the way to the brass fitting again. Then route out the silicone tube as shown in figure 4, fold the open end of the tube over onto itself, and seal the end with cable tie.

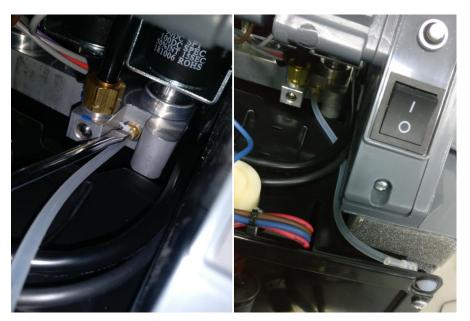


Figure 4

6. Remove the compressor enclosure cover and re-secure the capacitor with cable tie TW017-1. Then re-install the compressor enclosure cover and push the compressor enclosure back all the way into the center section. See figure 5.

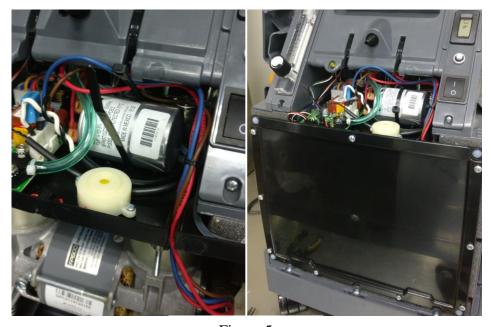


Figure 5

7. Re-install the front panel. Retest the device to ensure it meets all specifications before returning the device to service.

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SERVICE BULLETIN

PN: 20990410

RELEASE DATE: February 9, 2016

REVISION DATE(S): March 15, 2019 (Rev B), October 15, 2019 (Rev C)

MODEL: All Portable and Side Fill Reservoir Liquid Oxygen Units

ISSUE: Female QDV Lip Seal Change

NOTES: Issued as a running update, all Portable Liquid Oxygen and Side

Fill Reservoir Units will be manufactured with a standardized

Quick Disconnect Valve (QDV) Lip Seal.

Previously models of the QDV Lip Seal contained either a silicone Oring)P/N CA110104), while others were manufactured with a steel rosette spring (P/N B-775260-00). Existing Stock of QDVs equipped with CA110104 will be diminished and going forward, B-775260-00 will be used on all Top and Side Fill Female QDVs. The CA110104 and B-775260-00 Lip Seals are both forwards and backwards compatible.

All female Side Fill QDV built prior to 11 July 2016 should continue to use part CA110104. Any built after 11 July 2016 should use part B-775206-00. This is due to the side fill QDV requiring a small chamfer to enable the B-775260-00 to fit correctly, all Side Fill Female QDVs manufactured after 11 July 2016 have this chamfer.

This change was made as a standardization and to move towards a more robust design.

Figure 1 below shows both Lip Seal versions. Pictured on the left is the Lip Seal with silicone O-Ring that will be phased out. The Lip Seal on the right will be standardized going forward.

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Figure 1. Pictured Left is PN CA110104. Pictured Right is B-775260-00.

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SERVICE BULLETIN

PN: 21494318

RELEASE DATE: November 19, 2019

MODEL: FreeStyle® Comfort®

ISSUE: FreeStyle Comfort Battery Pack Duration Test

NOTES: The below procedure should be used to test the performance of the

FreeStyle Comfort battery pack. Be sure to only use a FreeStyle Comfort that is in good working condition for this test. If the device displays an alarm while in test mode, the unit will need service before being used to

perform the battery pack test.

- 1. Remove the FreeStyle Comfort from any carrying bags, backpacks, or other accessory carrying cases.
- 2. Fully recharge the battery using either a FreeStyle Comfort connected to AC power or a desktop charger.
- 3. Install the fully charged battery pack into a FreeStyle Comfort and remove any external power cords.
- 4. Turn the FreeStyle Comfort on and enter Test Mode pressing +, +, -, -, +, -, +, on the keypad. The entire sequence needs to be entered within 5 seconds. If a mistake is made while entering this sequence, the user must wait 5 seconds before attempting the sequence again. Patients should not breath off the device while it is in test mode.
- 5. Once in test mode the flow can be increased or decreased as usual. The battery duration test can be done at any flow setting.
- 6. While in test mode the unit will pulse at a pre-programmed frequency of 20 breaths per minute.
- 7. Using a stopwatch or timer, record the time it takes for the FreeStyle Comfort to completely shut down.
- 8. Take this time recorded and compare it to the full capacity operating time of a new battery pack in the table below. If this time is less than 50% of the full capacity of a new battery pack, it is recommended that the battery pack be taken out of service. See table below:

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FreeStyle Comfort Battery Duration							
Setting	New Single (8-cell) Battery Duration	Minimum Duration Time (50% of New	New Double (16-cell) Battery Duration	Minimum Duration Time (50% of New			
		Single Battery)		Double Battery)			
1	Up to 8 hours	4 hours (4:00)	16 hours	8 hours (8:00)			
2	Up to 4 hours	2 hours (2:00)	8 hours	4 hours (4:00)			
3	Up to 3 hours	1.5 hours (1:30)	6 hours	3 hours (3:00)			
4	Up to 2.25 hours	1.12 hours (1:07)	4.5 hours	2.25 hours (2:15)			
5	Up to 2 hours	1 hours (1:00)	4 hours	2 hours (2:00)			

NOTE: There are many factors that influence battery run time on FreeStyle Comfort:

- Ambient temperature
- Ambient pressure
- Compressor hours
- Device condition
- Battery age
- 9. To exit test mode, turn the device off or enter the test mode sequence a second time. Be sure to exit test mode before returning the unit to patient use.

FreeStyle Comfort batteries are designed to last 300 charge/discharge cycles: however, battery packs may perform to specifications past 300 charge/discharge cycles.

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