



Concentrator Talk - April 14, 2022

#	Topic	Video Link
1	Introduction and Welcome	Link
2	I am a biomedical technician at a private clinic, I am working on a 515 Devilbiss concentrator. I have refilled beds but the concentrator I am working on has a faulty rotary valve. I don't have a new rotary valve and purchasing a new one will take some time. But there are other faulty 515 concentrators at our workshop. I found a functional 515 valve block, can I use it to fix the problem?	Link
3	I am a technician at a certain mission hospital. I was working on an Airsep Intensity concentrator from a glostavent anesthesia machine. The concentrator was producing low purity of oxygen and the compressor was squeaking. I serviced the compressor and replaced the sieve beds. I was able to achieve 90% oxygen purity at 8 lpm. Then I replaced the oxygen concentrator on the anesthesia machine and returned it to the theater. But the anesthetist has reported that the concentrator LED for low purity is ON, meaning to say the concentrator is now producing low oxygen purity even though I tested it for two hours and the purity did not drop. What could be the problem and how can I solve it?	Link
4	I replaced a transformer on a Perfecto2 oxygen concentrator and the concentrator was back to normal. It was then sent to the ward. Three days later, I received a phone call from a nurse complaining that nothing was turning on when the power switch was flipped to the on position apart from hearing the sound of something running inside the concentrator. When I went to check I found that only the fan was running while all other things including LEDs were off. What could be the cause of this problem?	Link
5	I have an AirSep Intensity 10 oxygen concentrator that I am working on. The relief valve pops when the cycle switches to the left sieve bed of which I suggest that the solenoid for feeding this sieve bed might be damaged. I have a scavenged valve block of the same model from my concentrator graveyard, but I am not sure which of the four valves is working or damaged. How can I test the integrity of the valves?	Link
6	I am a biomedical Engineer at a district hospital and we are making preparations for corrective maintenance on concentrators which have stopped working or are malfunctioning. The activity will be carried out next week. During the maintenance besides servicing the compressors, some of the concentrators require that their beds be refilled with new Zeolite. I would like to refill the empty beds in advance in preparation for this activity but I am not sure of how properly I can store the refilled Sieve beds without damaging the zeolite as this is my first time refilling zeolite before the actual maintenance time. How best can I store the refilled sieve beds?	Link
7	Troubleshooting and fixing faulty control boards	Link
8	I was working on a DeVilbiss 515 that was brought to the workshop yesterday. When I switched it on, it started running, then I heard the compressor stop, then it started again after a few seconds, then the service alarm came on and the concentrator shut down. What could be the possible cause and solution of this problem?	Link

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9	I am a biomedical engineer at RiverSide Hospital, when I was refiling zeolite in the sieve bed, I discovered that the O-ring for the top cover had some small cuts as shown below. We had no spare O-ring in our stores hence I had to use the same O-ring. The oxygen concentrator was performing well after the service. Should I recommend the use of this concentrator?	Link