

COMMONLY ASKED QUESTIONS:

Q. The Flow Rate indicated on my LCD readout seems to be a very high number, in my rebreathing system I never used flow rates like 32 or 44 liters per minute, is this normal?

A. Absolutely, the LCD readout on the A.D.S. 1000 gives the Flow Rate if the unit were left on for an inspiratory time of 60 seconds (1 minute). An example would be as follows; say the A.D.S. 1000 was set to 24 L.P.M. and we let the unit have an inspiratory time of 1 minute, then 24 liters of gas would have been used. In reality, the A.D.S. 1000 only allows gas to flow for whatever the Inspiratory Time is. In order to determine the "Actual Flow Rate" a simple calculation can be performed. This calculation is as follows:

$$F_{ave.} = (F_{ins} \times T_{on} \times B) / 60$$

Where:

$F_{ave.}$ = Actual Flow Rate

$F_{ins.}$ = Flow Rate on L.C.D. Display

T_{on} = Inspiratory Time

B = Actual Breaths Per Minute

Q. How does the A.D.S. 1000 calculate the Minute Volume per Kilogram?

A. The formula for calculating minute volume is:

$$M_V = (T_V \times B) / W$$

Where: M_V = Minute Volume per Kilogram

T_V = Tidal Volume

B = Breaths Per Minute

W = Weight in Kilograms

The A.D.S. has a built in computer which determines this number and updates the display after each inspiration has ended.

Q. What is proper value for the Minute Volume per Kilogram number?

A. A properly ventilated patient should require from 150 to 250 ml. / minute / Kg. The 150 ml. / minute / Kg number is appropriate for larger patients and the 250 ml. / minute / Kg number for smaller patients.

COMMONLY ASKED QUESTIONS (cont.):

Q. How do I add additional anesthesia liquid to my vaporizer during a procedure?

A. To fill the vaporizer during a procedure, place the SET/RUN switch into the "SET" position, wait for the A.D.S. 1000 to complete the last breath cycle. Fill the vaporizer as usual, then switch back to "RUN" and continue.

Q. How do I change my oxygen tank when it is low?

A. As with any anesthesia system, be sure to check your oxygen supply before starting any procedure. To replace the tank, shut off the valve on the top of the oxygen tank, then depressurize the GREEN, "Oxygen In" line running to the A.D.S. 1000. The pressure may be released in the line by slightly loosening the GREEN, hose for a few seconds to bleed the line.

Q. I have just successfully completed several procedures, but when I turn the A.D.S. 1000 back ON and it goes through the SELF-TEST, the LCD display gives me Error 4 - LEAK/SAFETY LO, is this normal?

A. Yes, this Error is usually caused by a build up of condensation in the exhale valve of the A.D.S. 1000. To remove this condensation simply perform the following procedure:

- a. Turn OFF the A.D.S. 1000
- b. Place and hold your thumb over the end of the breathing circuit.
- c. Press the FILL & HOLD button and hold it down while turning ON the A.D.S. 1000.
- d. The unit is now in the FLUSH mode and a full 60 LPM flow of oxygen is passing through the A.D.S. 1000.
- e. To exit this mode, simply release the FILL & HOLD button and the unit will go through the self test.

COMMONLY ASKED QUESTIONS (cont.):

Q. Can I use the A.D.S. 1000 with my induction chamber?

A. Of course, if you put the A.D.S. 1000 into the MASK mode it will allow a continuous flow of anesthetic gas to exit through the breathing circuit. All you have to do is connect the mask adapter to the unit as described in the section USING THE MASK MODE, but instead of connecting the output to a mask, connect it to your induction chamber.

Q. Can I use my vaporizer at the same settings that I am used to using on my rebreathing system?

A. Since the A.D.S. 1000 delivers a constant plane of anesthesia on each breath, you may find that you can actually turn your vaporizer settings to about one-half of what you had been using with your rebreathing system.

Q. Why doesn't the A.D.S.1000 use a Lime Canister or Breathing Bag?

A. Since the A.D.S. 1000 is a positive pressure type of ventilator it only allows the oxygen and / or anesthetic to flow during the inspiration phase of the respiratory cycle i.e. only for the inspiratory time. Since the A.D.S. 1000 fills up the lungs for each breath there is no need for a breathing bag. The A.D.S. 1000 does not recycle the exhaled gas, it delivers the waste gas to the scavenger system.

Q. What happens if the electronic safety fails?

A. To prevent the over-inflation of the lungs, the A.D.S. 1000 incorporates both an electronic and mechanical safety mechanism.