

OUR LATEST ADDITION TO TECHNICAL SERVICE:

Gil Edwards, Cryo-Bio Technical Service Representative
Ph/ 770-720-6714 . Cell/ 612-889-7810 . Toll Free/ 866-819-5897
Fx/ 770-479-4603 . Email: gil.edwards@chart-ind.com

YOU ASKED FOR IT:

This month's Tech Tips are courtesy of questions asked by some of our distributors. Remember, the only stupid question is the one not asked!

WHAT IS THE BLACK SEAL FOR?

A distributor called in and asked about the function of the black seal between the cabinet panel and the ss Dewar reservoir on cabinet models.

There are two types of gaskets or seals on cabinet models. The white rubber gasket that goes around the perimeter of the lid. On this gasket there is a gap toward the back approximately 6" long. This is to allow gas and pressure to vent during the filling cycle.

The other seal is a black foam seal placed beneath the top panel where contact with the ss freezer occurs. This black seal provides an insulation barrier to prevent condensation from forming onto the top panel. This material is also used on stand-alone freezers beneath the cosmetic ring to serve the same purpose. This is to eliminate sweating on the top ring of the freezer.

The part numbers for each is 10825794 for the white gasket and 10640087 for the black seal.

WHAT IS MINIMUM SPACE REQUIRED BETWEEN XLC UNITS?

Another distributor asked if there is a minimum space required between XLC units. Their customer needed several freezers but had limited space available. Our response to them was no. There is no minimum space needed between units. As there is very little heat produced from the electronics and the freezers can be physically in contact with each other if need be. The real concern of having several freezers in close proximity is the ventilation exchange within an enclosed room. Adequate air exchange must be maintained to ensure proper oxygen levels.

CAN I CHANGE MY FREEZER FROM A 110 TO A 220 VOLT MYSELF?

A distributor contacted Chart with a problem he had with a customer order. It seems that the customer ordered a full auto freezer with 110 V system, and this is what was received. The problem was that the customer required 220V for the country he was in. The distributor suggested that they may be able to find a local electrician to change the power supply from 110V to 220V and that we could simply send the 220V labels for them to attach to the power supply.

YOU ASKED FOR IT (CONTINUED):

This is our reply: There is a switch on the power supply circuit board to switch the input from 110V to 220V. However, it is there to allow MDC to use the same printed circuit board on all of our power supplies, not to allow the customer to make the switch. It is a SAFETY ISSUE as well. The primary fuses differ between the two power supplies. The 220V unit has a 0.5amp fuse where the 110V unit has 1.0amp. Further, the fuses are soldered to the board and thus cannot be easily swapped out. Although replacing the cord and flipping the switch will make it work of all else is correct, in the event of a short circuit, the primary fuse rating will be too high, allowing the current to go too high before opening the circuit, thus creating a fire hazard. We cannot honor the warranty if they make this modification.

The correct approach would be to replace the power supplies with the 220V version (10883177). This power supply is properly fused for 220V operation. They probably will need to change the plug on the end of the cord to match their outlet, unless they use Euro type outlets. As far as 220V labeling is concerned, the power supply 10883177 comes with a 220V label on it. The 110V power supply does not have a voltage label on it. They are referring to the S/N label, which carries voltage and current values on it. This label part number is 10756004. The SO should have a text requesting that the labels be filled in for 220V application and include the S/N's of the units involved.

HOW TO DETERMINE STORING/SHIPPING CAPABILITY OF VAPOR SHIPPERS:

The following step by step procedure should be performed on each vapor shipper at least twice a year to determine if the shipper is still capable of storing and shipping your valuable biological samples. This will help determine if the dewar still holds per the manufacturer specifications. The material & equipment required consists of a nitrogen supply, weigh scale, a measuring stick (5613469), and a level register (10936355). It is imperative to record measurements at 24-hour increments.

1. Weigh dewar empty and record
2. Fill dewar with LN2. Fill dewar to bottom of neck tube. Topping off dewar with LN2 may be necessary after liquid stops boiling.
3. Allow unit to stand for 24 hours. Pour out excess liquid.
4. Weigh dewar & record weight. This is the dewar saturation weight.
5. Let stand for 24 hours, weigh & record today's weight.
6. Subtract today's recorded weight from yesterday's weight. This is the N.E.R. in pounds per day. To convert to liters per day multiply pounds by .5606.
7. Let stand another 24 hours, weigh & record. Again subtracting today's weight from yesterday's weight.
8. Convert difference to liters per day.

HOW TO DETERMINE STORING/SHIPPING CAPABILITY OF VAPOR SHIPPERS (CONTINUED):

9. Continue this procedure until you are confident you have achieved an accurate N.E.R. average.
10. The average should meet or exceed listed Chart specifications.
11. To determine hold time in days, calculate the saturation weight in liters and divide that by the N.E.R. This will be actual hold time in days.

One note to remember: if the unit is warm it may still show a higher than normal N.E.R. on the second to third day after filling. The more data recorded the more accurate the test. The same procedure can be used for determining the N.E.R. of liquid dewars except these would obviously not have a saturation weight and would not have excess LN2 removed.

NEW AI/CRYOBIO PRICE LIST TO GO INTO EFFECT JANUARY 1, 2002:

The New AI/Cryo Bio Price list will be e-mailed, faxed or mailed to all our distributors the first week of November. It will go into effect on January 1st, 2002. Please keep this in mind when quoting into the New Year. Any questions please call Bruce Edel, Bio-Med. National Sales Manager.

For copies of past Tech Tips or for more information on maintaining your nitrogen storage dewars please contact Jim Bachman at (952) 882-5168, Pager (612) 579-8367, Fax (952) 882-5175.



www.PrincetonCryo.com | Sales@PrincetonCryo.com | 800.232.2796