

MVE

Tech Tips



A monthly publication for the MVE Biological Products Distributors

We hope everyone enjoyed a healthy and prosperous 2000! Although we are beginning the New Year quite the same as the last, our Tech Tips will be taking on a new shape this year. We will be adding more featured articles and more color photographs to help MVE Distributors better understand answers and solutions for your customers.

The two options available on XLC models that you can be retrofit in the field are the **battery backup** and **hot gas by-pass options.** Generally if either of these are connected incorrectly they will not function properly, but the controller will continue to monitor the filling cycle and there will be no damage caused to the controller.

BATTERY BACK-UP:

To install a battery backup on a non-cabinet XLC unit is far easier than on a cabinet version. On non-cabinet units the 2 batteries come assembled into a shroud, this assembly is simply bolted onto the controller bracket and the wires connected to a phoenix connector. This connector plugs directly into the bottom of the stand-alone controller. To install a battery backup to the cabinet models requires a bit more time and technical knowledge. Supplied with each battery backup kit are installation instructions. This step by step manual makes correct installation very simple.

In each case it is imperative that the two wires, (blue & yellow) are connected properly. The blue wire coming from the battery negative terminal must be attached to the positive side of the connector. The yellow wire must connect to the negative side of the connector. If these two wires are crossed, it could damage the part of the circuit board that provides for the trickle recharge of the batteries. You will need the wiring schematic found in the back of the TEC-2000 manual to determine the polarity of each connection.

Hot Gas By-Pass

When installing the hot gas by-pass option the wiring connection should go as follows: the red and white wires from the temperature probe are connected first. Wire connection from left to right on the 8 pin connector will follow a color scheme of red, white followed with the gas by pass valve wires of black and white.

After completing the install of the hot gas by-pass option and/or the battery backup remember to go into the maintenance menu selection and activate the alarms. If by-pass sensor alarm is displayed, then recheck the wiring connection of the by-pass temperature probe. If connection is properly secured then check the resistance of the sensor with an ohmmeter across the ends of the leads at the plug. Your unit should read approximately 1000 ohm. If you read an open circuit or significantly less than 1000 ohm, the sensor needs to be replaced.



IMPORTANT MESSAGE

In order for us to provide the highest level of technical support for the TEC-2000 in the field, it is vital for us to have as much information as possible associated with any field problems. The best way for us to view this information is via email of the data file, which the TEC-2000 keeps in its memory. This is the best diagnostic tool we have and in many cases leads to the resolution of a problem without the need to replace components or ship the freezer to the factory. In light of this, we expect each distributor to have at least one cable set to enable local service providers to extract the data file and email it to our technical support in the event of a field problem.

In order to help you comply with our requirements, we are offering the cable kit (PN 10740221), together with some special software (PN 11507819), to enable the capture of the data file at a special price through February 28, 2001. The special price for this kit (PN 11507827) is \$175, which represents a significant saving on the current list price. Please contact customer service to place your order.

MVE Series 2001 - Dual Use Tanks "Wet Or Dry"

The traditional method of export shipment and distribution for Biological products such as semen and vaccines, has been based around wet shipment under liquid nitrogen. Over the past few years many of the traditional shipping companies have either prohibited the shipment of liquid nitrogen, or placed hazardous material surcharges on shipments to the point where this method is uneconomical.

In many cases vapor shippers have become the method of choice for cryogenic shipment. These shippers hold product at cryogenic temperature and allow most shipping methods to be employed, even for export shipments. From a transport point of view this is a perfect solution, from a distribution standpoint however it leaves much to be desired. Once at a destination, the samples have to be transferred into a liquid storage tank, and the shipping container has to be recovered by the shipping company.



Since the early 1960's MVE has been at the forefront of innovation and excellence in the field of storage and transportation of frozen biological samples, and once again MVE has taken a step in front of all other cryogenic manufacturers.

The Doble series tanks are the first units to be designed for both vapor shipment, and liquid storage. A unique absorbent layer in the base of the storage tanks enables them to be charged with nitrogen and employed as dry shippers with hold times of up to 30 days. Once at the final destination, the tanks can be filled with liquid as normal and used for long term storage.

The Doble Series 2001 line currently consists of five units:

- Doble 11 (11 liter, 6 week liquid, 3 week vapor storage tank)
- Doble 20 (20 liter, 18 week liquid, 3 week vapor storage tank)
- Doble 21XC (20 liter, 6 week liquid, 3 week vapor storage tank)
- Doble 34 (32 liter, 14 week liquid, 4 week vapor storage tank)
- Doble 35 (35 liter, 6 week liquid, 4 week vapor storage tank)

For more information on the Doble Series 2001 units please contact Lois Tuma, Inside Sales at (952) 882-5230 or Customer Service at 888-683-2796.

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.