

MVE Tech Tips

A monthly publication for the MVE Biological Products Distributors

August 2003

New TEC-2000 Stand Alone Controller

On or about the beginning of July 2003, MVE began installing an upgraded TEC-2000 stand-alone controller. This controller raises the limits of the high level parameters to 48" for the high level alarm and 47.5" for the high level fill point. To reduce confusion we assigned a new part number for this controller. The new part number is 11800329 and it replaces 10717486. We will still continue to stock refurbished controllers (10717486R) but at this time any warranty replacements for 10717486 will be with the newest version controller. It is important to note that this is more than just an e-prom chip upgrade. It is an upgraded controller and although they look the same and function the same, the e-prom chips are not interchangeable. Please make changes to your parts lists.

CryoShipper Mini Specifications and Descriptions

Chart/MVE offers 3 varying styles of the Cryoshipper Mini. All of them began as a custom dewar for different customers but basically all do the same thing. They are:

10979435 This cryoshipper mini has a fixed absorbent liner with a 4.5" wide cavity. This will have a 3 day hold. There is an optional square absorbent insert that can be added depending on how many of the blood boxes that need to ship. Each insert added will increase the hold time by one day.

11037378 This mini also has a fixed absorbent liner with a 2" wide cavity. This will have a 7-day hold.

11037386 There is no fixed absorbent liner inside. It is designed for shipping a variety of box sizes using removable absorbing blocks. They are not blocks as one would assume but rather half moons of different holding capacity. They are used in sets of two, but they can be mixed or matched. The sizes of these blocks range from large, medium and small. If needed the 1" square insert can also be added. Using the 2 large inserts in this dewar would basically be the same as using 11037378. The small inserts would offer the same hold time as 10979435. The medium inserts will allow a 3.5" cavity for storing with 5-day hold.

Specs For CryoShipper Mini

Cavity Size	8.5 X 4.5 X 10	8.5 X 3.5 X 10	8.5 X 2 X 10
Neck Opening	8.5"	8.5"	8.5"
Overall Height	20"	20"	20"
Outside Diameter	11.625	11.625	11.625
Empty w/o inserts/# 11037386 only	16.5	16.5	16.5
	Same as 10979435	Same as 11037378	
Empty with inserts/# 11037386	21.5	22	24
Weight full/#	28.25	29.5	34.25
Plastic shipping carton	9722149	9922149	9922149
Absorbed LN2 Capacity	2.9 liters	4.2 liters	5.9 liters
NER	.84	.84	.84
Static hold time	3.4 days	5 days	7 days
(add one day hold for each charged square insert added to cavity)			

How To Replace Lid Liner

Replace lid liner on an XLC-1211

Tools you will need

½" drive power drill

3/32", 3/16", or ¼" drill for removing existing rivets

utility knife

Phillips screwdriver

Rivet gun that will handle 1/8" rivets.

Remove lid from freezer. It may be helpful to loosen tension of springs but not required. Use cardboard to cover freezer while lid is being repaired. Or place lid upside down over freezer after removing from hinges.

Drill out old rivets.

Remove gasket and liner.

Line up cork so flat area is at the back of reservoir.

Set on new liner and center to metal cover

Install gasket.

Drill new rivet holes through gasket, liner and lid.

HINT-only drill 3 to 4 holes at a time and then install rivets.

Do not worry about lining up with old holes. Drill new ones.

Continue this way around circumference of lid.

Also, there is no need to use adhesive at the gasket ends, use rivets.

Clean up any filings and reattach lid to hinges.

Sanitizing and Decontaminating MVE Aluminum & XLC Dewars

MVE aluminum dewars are constructed with aluminum inner, which utilizes a fiberglass neck support. The stainless units are constructed with an inner entirely fabricated from stainless steel sheets. Any cleaning solution that does not react with aluminum or stainless can be used in the sanitation process of these dewars. In most cases, any household detergent or mild soap solution is suitable. The U.S. Custom service uses a solution called EXPOR for incoming shipments from abroad. This is mixed 9 parts water to 1 part EXPOR, and is applied with a spray nozzle. EXPOR is a sporocidal agent mixed with sodium chloride & a lactic acid. As mentioned above, however, any household cleaning solution can be used. These include bleach, detergents, and mild soaps. Other cleaners and disinfectants that can be safely used include hydrogen peroxide, chlorine/water and denatured alcohol. **NOTE: DO NOT USE ANY PETROLEUM BASED CLEANING SOLUTION.** It is important that the inner vessel is thoroughly rinsed with water and all cleaner residues have been removed. Spraying the solution into the inner vessel is preferred, although agitation of the solution inside the inner will suffice. Vapor shippers and Doble units will require filling the inner to its full capacity with the cleaning mixture and then rinsing. Allow the unit to dry thoroughly before putting into service. With vapor shippers, we suggest setting dewar inverted to drain and dry. This process is not intended for use in older vapor shipper models manufactured prior to 1994.

The generally accepted practice of using 10% chlorine bleach with 90% water solution still holds as the best method for decontamination. However, with some of the bovine and swine virus strains showing up today, it is the conclusion of the agricultural professors at the University of Minnesota and Texas A&M that an increased mixture of chlorine bleach to 30% and 70% water will kill all known viruses except BME. Which is still unknown to them and are not willing to offer a solution.

To perform this sanitizing procedure, cover all inner surfaces with the solution, let stand for 30 minutes and remove. Rinse the decontaminated surfaces with clean water and remove rinse water. Allow dewar to dry before putting into service. For vapor shippers and Doble units, this means to place dewar on end (inverted) and allow to dry. Note: vapor dewars can be used immediately after rinsing but may take longer to recharge to 100% capacity.

If you have any questions concerning decontaminating dewars please contact Bio-Medical Technical Service @ 952 641-6115.

Moving freezers

This is to clarify the procedure for moving a liquid storage freezer manufactured by Chart/MVE, Inc. Currently, Chart recommends that when a liquid nitrogen freezer is to be transported, the unit should be emptied and completely thawed. Further, good handling practice should be exercised in the actual transport of the freezer. Once the unit is relocated, the freezer should be charged with liquid nitrogen and tested for proper operation. Once the unit has been tested, sample can be placed in the unit.

It is understood by Chart that liquid nitrogen freezers are moved cold by end users without incident. Due to the fact that Chart Ind. does not have a procedure for this type of move, it should be understood that the unit is moved at the risk of the user and the manufacturer does not accept any liability. It is recommended that if a freezer is to be moved cold, the end user should consult with their local distributor to limit any risk to the material and freezer to be transported.

If the freezer is to be moved, our recommendation is to remove and distribute all non-essential samples to reduce overall weight of each freezer. The next step is to reduce the level of nitrogen so samples will then be in vapor storage. Hold time will need to be calculated.

The freezers themselves must be palletized and crated. Remember, these units were not designed for the rigors of freight handling when full. However, if they are to be transported do not stack. These units were not intended as shipping units, but careful handling along with the above recommendation will reduce the risk of damage to the freezer and the stored samples.

Bio-Medical Customer and Technical Service

Customer Service	888 683-2796 toll free 952 882-5000 Burnsville receptionists 800 232-9683 fax
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Technical Service	952 641-6115 direct line 866 819-5897 toll free 612 382-6678 cell 800-232-9683 fax
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New Repair Program Pricing

ALUMINUM REPAIR PROGRAM

PLEASE NOTE THAT MVE-CHART WILL NOT DECONTAMINATE ANY FREEZER ON RECEIPT. MVE-CHART WILL NOT ACCEPT DELIVERY OF ANY UNIT FOR WHICH A DECLARATION OF DECONTAMINATION HAS NOT BEEN RECEIVED PRIOR TO SHIPMENT.

LEVEL 1	INSPECTION / SCRAP FEE	\$ 50.00
	<ul style="list-style-type: none">• MASS SPEC	

LEVEL II	REVAC ONLY	\$200.00
	<ul style="list-style-type: none">• INSPECTION• RE-EVACUATION• LIQUID TEST (NER)• 1 YEAR VACUUM WARRANTY• 3 WEEK TURNAROUND	

LEVEL III	COMPLETE REPAIR	\$275.00
	<ul style="list-style-type: none">• INSPECTION• RE-EVACUATION• LIQUID TEST• PAINT• NEW LABELS• NEW CORK/COVER• ONE YEAR VACUUM WARRANTY• 4 WEEK TURNAROUND	

LEVEL IV	NON-MVE MANUFACTURED DEWARS	\$275.00
	<ul style="list-style-type: none">• INSPECTION• RE-EVACUATION OF VACUUM SPACE• NO WARRANTY• PAINT	
		ADDITIONAL \$75.00

REMOVE CANISTER AND CORK/COVER BEFORE SHIPPING. MVE-CHART CANNOT REPAIR NON MVE VAPOR SHIPPERS.

NOTE: NEW REPAIR PROGRAM PRICING TO TAKE EFFECT SEPTEMBER 1,2003

New Repair Program Pricing

STAINLESS XLC REPAIR PROGRAM

PLEASE NOTE THAT MVE-CHART WILL NOT DECONTAMINATE ANY FREEZER ON RECEIPT. MVE-CHART WILL NOT ACCEPT DELIVERY ON ANY UNIT FOR WHICH A DECLARATION OF DECONTAMINATION HAS NOT BEEN RECEIVED PRIOR TO SHIPMENT.

INSPECTION FEE/ SCRAP FEE

\$100.00

LEVEL I

REVAC ONLY

\$550.00

- TEST REPAIR
- LN2 TEST
- REVAC
- ONE YEAR VACUUM WARRANTY

NOTE: THERE WILL BE A \$250.00 ADDITIONAL CHARGE IF CABINET HAS TO BE REMOVED AND REINSTALLED.

LEVEL II

COMPLETE REPAIR /COSMETIC

\$800.00 NON CABINET

\$925.00 CABINET

- LN2 TEST
- REVAC
- MASS SPEC
- RE LN2 TEST
- BUFFING AND CLEANING
- ONE YEAR VACUUM WARRANTY

NOTE: THIS DOES NOT INCLUDE ANY ELECTRICAL WORK OR PARTS. THOSE ITEMS ARE ADDITIONAL.

LEVEL III

REPAIRS INVOLVING CUT APART

XLC 511 AND SMALLER

\$1300.00

XLC 800 AND LARGER

\$2100.00

NOTE: NEW REPAIR PROGRAM PRICING TO TAKE EFFECT SEPTEMBER 1,2003

For copies of past Tech Tips or for more information on maintaining your nitrogen storage dewars please contact Jim Bachman at (952) 882-6115, Pager (612) 579-8367, Fax (952) 882-5172.



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