



MVE Tech Tips



A monthly publication for the MVE Biological Products Distributors

December 2003

Dear Distributor:

After we issued the 2004 price lists – and followed several of you raising the question, I realized that we made a change to the availability of options for the stainless (XLC / MVE) products that we failed to explain fully to you.

Following the European MDD certification that we achieved for the product range in 2003 we took the decision to increase the value we offered to our end users by consolidating the options for the range of XLC / MVE products.

Simply we combined the battery backup and gas bypass options to create one fully featured product, while maintaining the prices at the level of a single option – two for the price of one!

You should be assured that orders for FABB and FAGB units will be entered and shipped with the existing part number through the first quarter 2004.

Below, in our Tech Tips, we have listed the part numbers and prices of the individual accessory kits for field addition of the individual gas bypass and battery backup options.



We want to take this opportunity to extend our Holiday Wishes to each of you, your staff and families. We wish you Peace and Good fortune in 2004!!

MVE-Chart CryoBio Team

A. Field retro fit kits

The following list is the part numbers for field retrofit kits for gas by-pass and battery backup systems. The list price and matching models are included.

<u>Hot gas by pass retrofit kit</u>	used on	list
10753920	1211,511,1841	\$402
10804221	1200,500	\$402
11062194	600,611,1400,1411	\$420
11836461	1830,1830-2T	\$402
	1830HE,1520HE	
	810HE	
11836461	230 G2,1370,810	\$402

These are used to keep warm nitrogen gas from flowing past stored samples. The general rule of thumb is if the supply lines are 12 feet or longer, a gas by pass should be considered. Once installed it must be enabled through the maintenance menu. The by pass time delay and temperature can also be adjusted in the menu.

Battery backup Kit

10753938	1370,1830,1830-2T	\$500
	1830HE,511,810,	
	1520HE,230 G2,810HE	
10800870S	1211,1841	\$340
10804213S	1200,500	\$244
11482877	600,611,1400,1411	\$436

These kits can only be used with Micro Dynamic TEC-2000 controllers. Generally all XLC models manufactured in 1996 and later fall into this category. As with the gas by pass this also must be activated in the maintenance menu. It will automatically take over in the event of a power outage and operate the TEC-2000 for up to 72 hours. It will also alert the operator of the power outage once the power is restored.

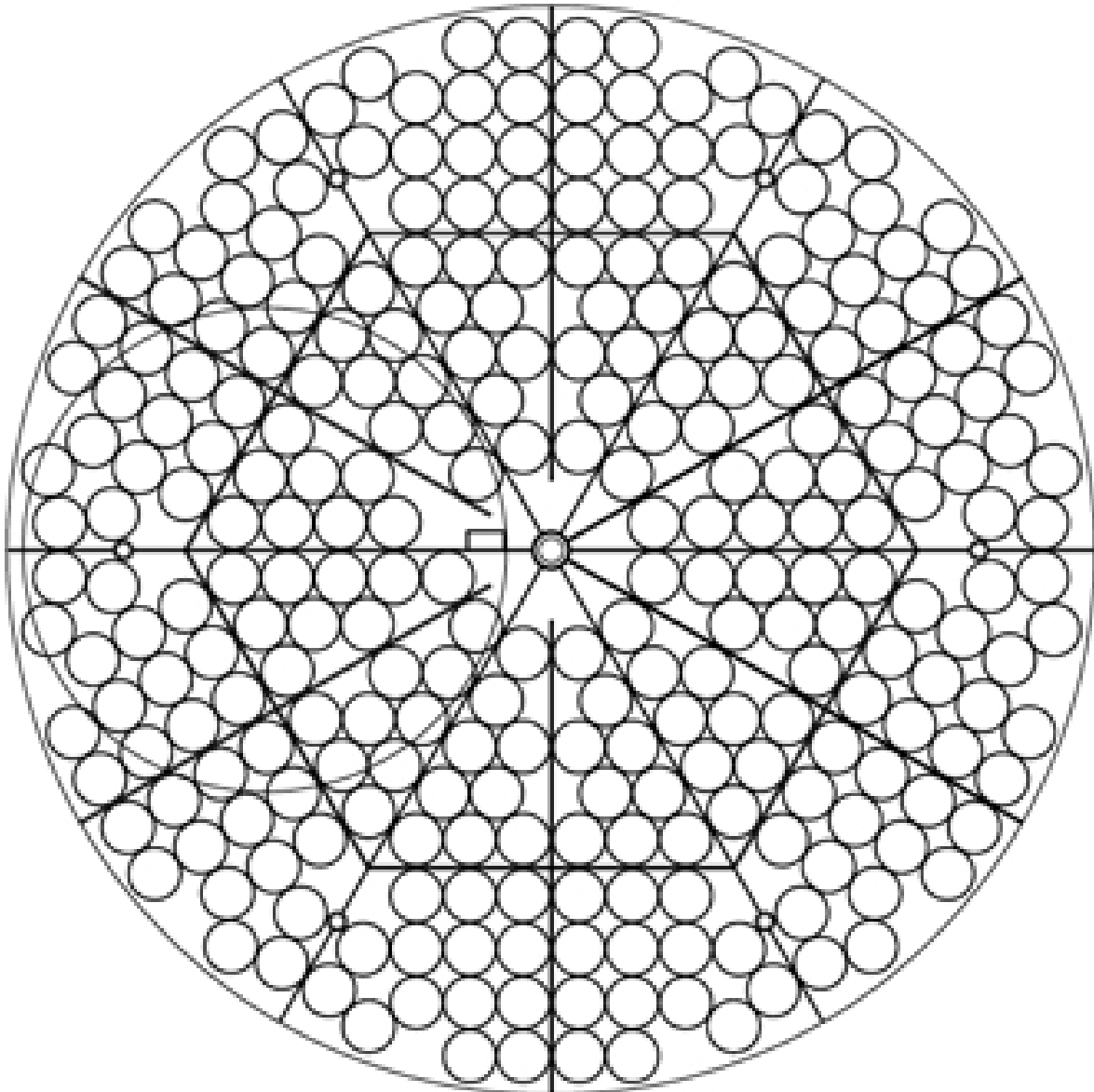
B. Controller Upgrades

Upgrading MDC controllers can easily be done by installing the 1.71 version e-prom chip. This will allow the by-pass temperature cut out and bypass time delay parameters to be changed from the front panel. Another feature is the One Fill All Fill operation. This allows 2 or more controllers to fill cycle if any of the freezers on the system requires LN2. If only two freezers are hooked up then only a master cable is required. If more than two freezers are on OFAF then one daisy chain kit is required for each additional freezer. The number of splitters will be equal to the total number of freezers on OFAF less 2.

Finally, what if the freezer was manufactured prior to 1996? An easy way; to detect if the TEC-2000 is MDC or Lakeshore is to check for a maintenance menu. If there isn't one then the controller is Lakeshore. These freezers can be upgraded to a MDC controller while still allowing the valves to function at AC voltage. A controller upgrade

C:\Data\DWG'S\Pack stu\XLC 1830HE 70mm CANISTER LAYOUT w-subdividers.dwg, 04/10/2003 04:07:23 PM, Acrobat Distiller, JEFF BRK

**XLC 1830HE
70mm CANISTER
LAYOUT WITH
SUBDIVIDERS**



**275 CANISTERS
PER LEVEL**

kit will allow this freezer most of the same options as the newer models. Part numbers and prices are listed below:

Stand alone MDC upgrade kit	10782000	\$1860.00
Cabinet MDC upgrade kit	10770244	\$1647.00

C. Important Notice

Silicon Diode temperature probes for Lakeshore Controllers are no longer available. Freezers with Lakeshore controllers are at least 8 years old and should be considered for either replacing with new freezers or upgrading controller to MDC.

D. Recording Data

Converter Kit	10740221	\$296.00
Required for down loading TEC-2000 data or changing some parameters.		
Printer kit	11544943	\$1835.00
This includes the converter kit, DB-25 M/M adaptor and an Epson printer		

1.71 version E-prom chip	11178453	see attached parts list
Master cable OFAF	11358251	\$77.50

Daisy chain Kit	10856321	\$52.50
This kit includes 1 of RJ45 cable and 1 of jack splitter		

E. Surge protection

Chart is now offering a power conditioner assembly that will protect the controller from the constant blasts from unclean power supplies. The TEC-2000 power supply simply plugs into this conditioner, which can be wall mounted or placed on the floor.

Power conditioner assembly	11807011	\$810.23
Power conditioner w/wall mt.	11749885	\$947.40

F. Question & Answer

Question: Does Chart have a divider that will divide the existing 1830HE tray even further?

Answer: Yes, we do have a subdivider system that further divides the tray sections. The part number is 11840769 and the price is \$530. There are 2 parts per section for a total of 12 pieces for one freezer. Attached is what it looks like with 70mm canisters in it.

(See diagram on page Three)

Question: Is there a substantial loss rate difference between the -150 and -190?

Answer: With the scales that we use for liquid test, there is not a measurable difference.

Question: Is the lid switch on the 600 and 1200 the same as what was used on the 500 and 1200?

Answer: The lid switch used on the 600/1400 is not exactly the same as that used on the 500/1200, however they are interchangeable. The one used on the 600/1400 has a "Cheat interlock" feature that allows you to pull it up to allow filling with the lid open.

G. Spare parts available at huge discount.

The following parts listed are considered excess inventory and will be sold at a greatly reduced price. Simply call and make an offer. No reasonable offer will be refused.

Part Number	Description	On Hand Quantity
10823414	WASHER #10 STAR EXTERNAL	696
11731837	BOX 2"FREEZER YELLOW CDBD	7147
10486489	PANEL FRONT ELECTRONIC	17
11653701	CANISTER BAXTER 4R-9953 W/O	250
11392644	RACK SQ SS 2-SUC-1 BOX	88
5613821	CHANNEL SNAP-ON .875*12'LG	93
11395896	RACK SQ SS 8-SUC-1 BOX	54
9721289	BOX SS AH 3" 81 CELL	180
10651288	GASKET XLC 500 GEN 2	39
10588021	LINER LID XLC 1200 GEN II	19
10465389	BOX SS AH 3" 112 CELL	182
10581005	DIVIDER 1200/1400 4R9955	2
10513694	TUBE SS 3.750"OD .375W WLD	26
10738447	GASKET XLC 1200 GEN III	28
10586842	KIT GASKET REPLACEMENT XLC1200	2
3310291	PIPE SS 8.000NPS SCH 5 WLD	30
5500631	STRIP LOCKING TAB	22
11023777	TERMINAL PLUG 8 POLE PHOENIX	222
11742931	RACK SYS 600 SQ 13-2-L P SS	1
11745702	RACK SYS 600 SQ 11-2-V C AL	1
10581099	DIVIDER 1840 BAXTER 4R9953	1
10951150	CANISTER 21.3130AL*4.238ID	50
10837111	BOX STAND ALONE REHAB KIT	123
10901304	RACK SQ SS 2-12 MINI FOR SUC-1	40
10581021	DIVIDER 1200/1400 DF-700	1
10764637	LID ASSY XLC 1200	1
11011944	RACK HEART VALVE CBS STYLE	24
5615109	PANEL BACK W/O TEMP	1
11653699	CANISTER FRAME BAXTER 4R-9953	25
11178453	EPROM MDC TEC 2000 V 1.71	102
6310195	ANGLE AL 2.00 * 2.00*.187	14
9014565	PLATE AL .125 * 27.000* 27.000	20
10669971	TUBERECT AL 1.750*4.500*.125W	43
10973711	TUBE FILL 1/2"OD 53DEG ANGLE	36
10785147	PANEL BACK ELECTRONIC TEC2000	1
10823596	GROMMETTING STRIP .250 PANEL	520
10501319	ELBOW BRS 90D 1/4ODT*1/8MPT	100
10547771	RACK SYS 500 SQ 8-3-L C AL	1

11524299	MAGNETIC LID LOCK INSTALLATION	1
10905938	RACK SYS 1200 MINI 7-3 P AL	1
11357873	HINGE LID XLC 1841/1840 GEN2	8
10545291	BOX PLS SQ 3.75" 81 CELL	84
10503066	BRACKET POWER SUPPLY	58
6410105	PLATE AL .250 * 48.000*120.000	1
11207728	CLIP RELAY RETAINING	1553
2913489	HOOK W/PSA SCOTCHMATE 3M	3
2711421	TUBE SS 3.500"OD .250W SMLS	6
10654041	PRIMER INDUSTRIAL WASH	5
10468660	FORM 2138A LIQUID NITROGEN	1900
9719659	BOX PLS SQ 3" 100 CELL	66
10687846	LOCKING TAB 1.25" LG	36
10501941	ELBOW BRS 90D 1/2ODT*1/4MPT	47
10976277	EPROM MDC TEC 2000 V 1.6	62
10540756	TUBE SS 1.750"OD .250W 18.250"	7
11745761	RACK SYS 600 MINI 11-2 P AL	1
5618351	HINGE REINFORCEMENT PLATE	109
10544335	RACK SQ SS 8-3 LARGE	7
10654059	REDUCER/CATALYTST FOR PRIMER	6
10658316	DIVIDER A-TEC 1830	15
10946570	PLUMBING ASSY BIO IV & V	1
11032905	INSERT THREADED 1/4-20 BRS	540
10934561	SENSOR ASSY XLC1830 DUAL TUBE	5
11707984	CHANNEL GUIDE 24.832"810HE+	2
3010279	CORK VACUUM FORM	1
11752321	HHMS SS 1/4-20*1.75"LG	200
5616579	COVER XLC 450	2
10854165	BRACKET ASSY BATTERY BACK-UP	17
7010065	TUBE AL .750"OD .083W	109
5617091	TUBE .750"OD * .875	3
10810947	PLATE HINGE	22
10491157	LOCK ASSY 90D CR W/BLACK ZINC	19
10798520	TUBE SS .250"OD .020W 39.000	19
10544589	RACK SQ SS 8-3 MINI	4
11520360	PLUMBING ASSY KIT CRYOSAFE	2
10980920	MNL CRYO-CYL 35/50 LP	116
4613399	TRANSFORMER STEP-DOWN 230/115V	1
4710227	GASKET MAGNET-ALL 37*87	2
11376302	CANISTER FRAME 4PLC 4R9957	3
10934579	SENSOR ASSY XLC1830-2T DUAL TB	2
10798554	TUBE SS .250"OD .020W 33.250	10
10754914	SENSOR ASSY XLC 810	1
10783774	SPADE MALE .187" FULLY INSULAT	100
4710217	GASKET TYPE A CURVALL REPLACE	1
11025511	TERMINAL PLUG 4 POLE PHEONIX	14
11707976	DIVIDER AL XLC810HE+	1

10737532	FUSE 4A SLOW BLOW 250V	33
10516203	CORK LID XLC 1200	3
10737701	WIRE 16GA GREEN STRANDED	500
2915651	SHCS SS 1/4-28*3/8"LG 18-8	96
6310375	CHANNEL AL .500* .750*.125	23
9098171	STRIP SS .105*1.0"*13.0"	52
10810701	FOAM STRIP 1/8"THK*1/2"W*50"RL	1
2913135	POP RIVET AL 1/8*3/4"LG	176
2910461	FHSLMS SS #10-32*1/2"LG	242
10902796	WASHER FENDER #6 .195ID*.875OD	100
5617061	PLATE LOCK	1
9719639	BOX PLS SQ 3" 25 CELL	1
CA405145	WASHER SPLIT LOCK SS #8 18-8	150
11747476	SENSOR ASSY HE DUAL TUBE 44"LG	7
11208974	RV ASSY GENERANT 230PSI W/	3

Parts will be sold on a first call basis. When they are gone they will not be offered in a sale like this again.

Contact Chart Customer Service for more about the listed parts and ordering information.

H. The Big Sale

"How many customers did you serve today?" the manager asked. "One."
"Only one? How much was the sale?" "\$58,334.00!" Flabbergasted, the manager asked him to explain. The boy said, "First, I sold the man a fishhook. Then I sold him a rod and a reel. Then I asked him where he was planning to fish, and he replied, 'Down the coast.' So, I suggested he'd need a boat – he bought that six-meter motorboat. When he said his car might not be able to pull it, I took him to the auto department and sold him a big vehicle." The amazed boss asked, "You sold all that to a guy who came in for a fishhook?" "No," the salesman replied, "He actually came in for a bottle of aspirin for his wife's migraine. I told him, 'your weekend's shot. You should probably go fishing'"

Bio-Medical Customer and Technical Service

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Technical Service 952 641-6115 direct line
866 819-5897 toll free
612 382-6678 cell
800-232-9683 fax

For copies of past Tech Tips or for more information on maintaining your nitrogen storage dewars please contact Jim Bachman at (952) 641-6115, Fax (800) 232-9683.