



MVE TECH TIPS



MVE Tech Tips January 2006

We would like to start off hoping that everyone had a Happy Holiday.

SPEC CHANGES

You may have noticed some changes to the internal clearance heights in some of our MVE units. The internal clearance height of MVE 1400 and 1411 has been increased 1". The corrected internal clearance heights for the 1411 are as follow:

MVE 1411 built through October 2005, internal clearance height is ~719mm (29.3").

MVE 1411 built after October 2005, internal clearance height is ~745mm (29.3").

The corrected internal clearance heights for the 1400 are as follows:

MVE1400 built through October 2005, internal clearance height is ~734mm(28.9"). MVE 1400 built after October 2005, internal clearance height is ~759mm(29.9").

The MVE Gen2 511,600, and 611 have also changed. The spec changes are as follows:

MVE 511 Gen2 built through June 2005, internal clearance height is ~719mm(28.3").

MVE 511 Gen2 built after June 2005, internal clearance height is ~762mm(30").

The internals clearance height for the 611 is as follows:

MVE 611 built trough October 2005, internal clearance height is ~723mm(28.5").

MVE 611 built after October 2005, internal clearance height is ~749mm(29.5").

MVE 600 built through October 2005, internal clearance height is ~737mm(29").

MVE 600 built after October 2005, internal clearance height is ~762mm(30").

FOLDING STEP FOR 1520HE

Beginning in February, all 1520HE series freezers will now be equipped with a 2-tier folding step, similar to the one used on the 1830HE series. The new step lowers the lift-over height of the 1520 HE series significantly, creating a safer work environment. The step can also be folded away when not in use, thereby reducing the overall footprint of the freezer. Models affected include the 1520HE, 1520 Eterne, 1520 HE+, 1520 Gen II, etc. Pictures will follow in future marketing material and editions of Tech Tips.

VAPOR STORING IN LIQUID STORAGE DESIGNED FREEZERS

In the event that the end user still wants to vapor store into one of the listed models, the temperature sleeve is still available as an accessory. This can be retrofitted into any of the following units:

MVE-511
MVE-1211
MVE-1841 Gen2
MVE-600/611
MVE-1400/1411

This will need to be added to the sales order much the same way the vapor platform is currently ordered, as a line item addition to the order.

MODEL	SLEEVE	VAPR PLATFORM	VAPOR PACK
MVE-511	11062055	10544853	
MVE-1211	10742518	10544888	
MVE-1841 Gen 2	11541241	10544909	
MVE-600/611	11937317	11509726	11913243
MVE-1400/1411	11934044	10544888	11913235

*Vapor packs include the hanging sleeve and the vapor platform

Installing the vapor sleeve will lower the temperature in the top of the freezer to approximately -125°C . Remember the tradeoff is that the freezers will use more LN2 with the sleeves installed.

QUESTION AND ANSWER

Q: We have had a new freezer fail to fill. It is equipped new dual solenoid valves from Alcon. LN2 would not flow when called for. We disassembled all valves and found what appears to be defective coils-very low magnetic field=no actuation.

A: *Currently used Alcon valves have a lower operating pressure than the ones that we have used in the past. Where earlier Alcon's would operate with 50 psi inlet pressure, the current Alcon has a limit around 35 psi, which should not be a problem if customer are following our supply pressure recommendations. Alcon had to change the coil so that the combined resistance of the dual valves was appropriate to avoid the power supply cycling on and off. (See Tech Tips of March 2004). We initially changed to the SMC valve to address the issue. However, the SMC valve was not UL Recognized, so we had to change back to the Alcon to allow the freezers to be UL marked. When we went back to the Alcon, Alcon began supplying them with a different coil resistance so that they would not cause the power supply to cycle on and off. The change in coil resistance changed the operating pressure. Again, if they are using 22 psi supply, there should not be a problem. However, if they are approaching 35 psi on the supply, they may have issues. The issue of marginal ability to open at 35 psi has been brought to the attention of Alcon, and they are working on it. Meanwhile, SMC has been working with UL to get their valve UL recognized so that we can use it on UL marked freezers. SMC's project at UL was finally completed last month. We are in the process of having the SMC valve added to our file so that we can change back to the SMC valve. In the mean time, Alcon's in the field that must operate at 35 psi or beyond, can be replaced with the SMC valve. We cannot ship them that way, but distributors can swap in SMC's after the fact if desired.*

Updated Table of contents to include 2005

TECH TIPS SEPT. 1997-APRIL 2003

TABLE OF CONTEXT

ALPHABETICAL LISTING ACCORDING TO SUBJECT

	<u>Subject</u>	<u>month/year published</u>
A.	Aluminum replacement parts	3/2000
	Aluminum LN2 dewars	8/2001
B.	Brakes-caster XLC-1830	8/2001
	Battery backup	1/2001
	Bat liquid level alarm	3/2000
C.	Controller TEC-2000	12/1997
	Cryo-claw	12/1999
	Cork	10/2002
	Cork/cover	7/1998
	Cancellation policy	
	Contracts, credit	9/1998
	Order	2/1999
	Cryo-cyl	
	Pricing	10/1999, 10/2002
	35 & 50	11/1999
D.	Decontamination	2/1998, 8/1998, 1/1999
		6/1999, 7/1999, 5/2000
	Damaged shipments	8/1998, 5/2000, 3/2003
	Dewars, research	11/1999
	Desiccants	3/2003
	Doble units	1/2001
	Download data-TEC-2000	12/2000, 1/2001, 4/2003
E.	E-Prom chip	2/2000
	Edwards, Gil intro	8/2001
	ETERNE	10/2002
	Event log download	4/2003
F.	Fill valve	11/1997
	Filter in-line	2/2002
	Full auto cryo-6000	3/2002, 6/2002
	Fuses-controller TEC-2000	3/1999
G.	Gas by pass	7/1998, 1/2001
	Gordinier Electronics	4/2000
H.	Handles	10/2002
	Hazmat regs	7/1998
	HE vs CBS freezers	5/2001
	HE freezers -190C	7/2001
	Hinge replacement	6/2000, 10/2002
	HL-119, HL-190	8/2002
	HyperTerminal upgrade	12/2000

I.	Imploding inner	3/1998
	Inventory sale	10/2000
	Inventory refurbished	4/2001
	Isotherm vs 1520HE -190C	8/2001
L.	Lid replacement	11/1997
	Lid	10/2002
	Logger data	7/2000, 6/2001, 12/2001
	Calibration	1/2002, 4/2003
	Liquid usage calculation	4/2003
M.	Maintenance Preventive	12/1999, 2/2003
	Manual corrections	1/2002
N.	New products	11/1998
	N.E.R.	3/2003
O.	Operating instructions A.I.	3/2000
	Operating instructions	11/2000, 7/2001, 8/2001
	OFAF	1/2003
	Overfilling dewars	4/2002
P.	Parts sale XLC	1/1998
	Excess parts sale	12/1998, 4/1999
	Power supply/fill valve case problem	6/1999
	Paint system	3/2002
	Power cords	10/1999
	Parts replacement	11/2000
	Phase separator for discharge device	8/2002
	Pricing 2003	11/2002
Q.	Question & answer	8/1999, 11/2001
	Question-trouble shooting empty cyl.	2/2003
R.	Rental vapor shipper	6/1999, 7/1999
	Rental program	8/2000, 3/2002
	Recorder for TEC-2000	7/1999
	Repair program	5/2000, 4/2002, 8/2000, 4/2001
	Replacement kit-plumbing parts	4/2000
	Rust removal	2/2002
S.	Sale-refurbished inventory	11/2000, 2/2003
	Sanitizing	4/2001
	Settings for XLC units	7/2000
	Spare parts	10/1997
	Shipping cartons	1/2002
	SUC box w/handle	8/2000
T.	Tank switcher	7/2000
	Temp curve silicon diodes	5/2001
	TEC-2000 refurbished controller	10/2000
	Tee assembly	6/1998
	Temp module ampules	10/1998
	Tray table access HE units	2/2002

	3 way purge valve	9/1997
	Tools for servicing XLC	5/1998, 8/2002
	Tool box	1/2000
U.	Upgrade program termination LSCI	11/1998
	Update user manual	3/1999
	Update phone and address CS & TS	5/1999
V.	Valve-purge valve case problem	9/2001
W.	Warranty change	4/1999
	Warranty	5/2000
	Water in units	10/1999
X.	XLC-230 & 230 GEN II	3/2000
	XLC-810HE GEN II	11/2002
Y.	Y2K protection	2/1998

TECH TIPS May 2003-Dec.2004

Table of contents

Alphabetical listing according to subject

Alphabetical listing 9/97 through 4/03	5/2003
Aluminum temperature sleeve	9/2004
Battery backup and hot gas by pass install kits	10/2004
Battery backup charging	6/2004
Cryo-cart	8/2004
Cryoshipper mini specifications	8/2003
Cryosystem 750	4/2004
Conversion formulas and hard to find part numbers	10/2004
Data logger warranty	3/2004
Decontaminating HE series.	8/2004
Decontamination protocol from overseas	5/2003
Dippers	10/2004
Dual fill valves	11/2003
e-prom chips	12/2003
exemption letter for vapor shippers	11/2004
Gas by pass temp. adjustment	5/2003
HE+ and HE Eterne comparison	11/2004
Height restrictions of liquid level parameters	9/2003
High level alarm 1830HE	6/2003
Hinge replacement	8/2004
Inline filter	6/2003
IQ/OQ/PQ	1/2004
Lock removal tool	4/2004
Moving freezers	8/2003
MVE511 gen 2 and comparison	8/2004, 10/2004, 11/2004
Plastic shipping containers	10/2004, 12/2004
Power supply change	3/2004
Preparing vapor dewar for shipping/for receiving	6/2004
Redesign HL-120 and HL-190	9/2003

Rental program for IATA shippers	12/2004
Repair pricing	8/2003
Replacing lid liner	8/2003
Research dewars	10/2003
Roller base	10/2004
Solenoid fill valve change Alcon to SMC	3/2004, 9/2004
Shipslog-recalibrate and battery replacement	2/2004
Subdividers for 1830HE	12/2003
TEC-2000 stand alone latest revision 48" height	8/2003
Technical service training overview	5/2004
Testing TEC-2000 alarms	12/2004
Turntable concerns	9/2003
Upgrade kits	12/2003

TECH TIPS Jan. 2005 through Dec 2005
Table of Contents
Alphabetical listing according to subject

Calibration chart MVE-XLC	5/2005
Caster change to MVE 1400/1411	3/2005
Changes to 1520HE, Eterne, +, Gen 2	3//2005
Changes to 1830HE series	1/2005
Changes to 810HE, Eterne, +, and Gen2	5/2005
Chart Literature Library	9/2005
Commonly used spare parts	12/2005
Data Logger repair policy	4/2005
Fill time adjustment	10/2005
Freezer gasket attaching	11/2005
Front panel w/international symbol	5/2005
HL-120, HL-190	7/2005
Communicating TEC-2000 with MAC	6/2005
LN2 usage calculations	11/2005
Obsolete MVE 1841, XLC-1200	11/2005
Power supply change in MVE freezers	3/2005
Power supply change in interface kit	9/2005
Power supply cords 120 & 240 volt	11/2005
Product line changes-Elim. FD variant	10/2005
Protective shipping cartons	11/2005
Rack system layout on website	9/2005
Repair pricing update	6/2005
R-stock sale	4/2005
Shipping containers	3/2005
Stand alone replacements	10/2005
Table of contents	1/2005
Tank switcher	9/2005
Tec-2000 language-English	9/2005
Tec-2000 universal symbol translation	5/2005
Tech Tips on Chart website	1/2005
Temperature sleeves	5/2005
3 probe sensor assembly	7/2005
Vapor packs 600/1400	3/2005
Warranty change to include moving units	12/2005
Xtra large shipping container	10/2005

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