



MVE Tech Tips



September, 2006

Changes to GEN2 1841

The majority of changes to the 1841 from Gen1 to Gen2 consist of changes to the plumbing. The new back enclosure is similar to those used on the 611 and 1411. The enclosure contains the same plumbing, battery

backup, power, and gas bypass assemblies as the 611 and 1411. Additionally, the mounting bracketry is the same as on the 611 and 1411. Externally, the lid has been modified to account for the slightly deeper rear enclosure. Capacity remains the same, as the inner and outer shells remain the same.

TEC2000 to TEC3000 Upgrade Kits

P/N	Description	List Price
13319459	TEC3000 RPL W/TEXT DISPLAY	\$1500
13319467	TEC3000 RPL W/SYMBOLIC DISPLAY	\$1500
13319475	KIT UPGRD LSCI CAB TO TEC3000	\$2700
13319491	KIT UPGRD LSCI TO TEC3000	\$2400
13319504	KIT UPGRD MDC CAB TO TEC3000	\$2500
13319512	KIT UPGRD MDC TO TEC3000	\$2200

Shipping of “Vapor Shipper” Dewars

There have been several concerns regarding the correct procedures for shipping, handling and labeling of vapor shippers. Regionally, UPS and FedEx disagree amongst themselves as to what can be properly shipped and what cannot. Because of this disagreement, we went directly to IATA for answers. Below is the letter drafted by the TSA (Transportation Security Administration).

This is concerning the applicability of the Federal Hazardous Material Regulations to the shipment of refrigerated samples in the “Dry Shipper” container.

A “Dry Shipper” package consists of an outer container that is lined with an absorbent material. The container is charged with nitrogen-refrigerated liquid, which is absorbed into the container lining. The charged, completed package serves as a refrigerated container for the shipment of samples.

Because of the manner in which it is absorbed and because there is no free liquid present in the packaging, the liquid nitrogen does not exhibit the characteristics of a “cryogenic liquid” as defined in 49 CFR 173.115 (g) and does not pose a hazard in transportation. Therefore, it is not subject to regulation under the Department of Transportation’s Hazardous Materials Regulations.

However, if the packaging is improperly offered for transportation WITH free liquid present, it would be subject to regulation when offered for transportation by air (see 49 CFR 173.320) and must be offered in accordance with the International Civil Aviation Organization’s (ICAO) Technical Instruction. Note the packaging does not conform to ICAO Packaging Instruction 202 and therefore, is not an authorized packaging when containing free liquid.

In consideration of the above, consultation with the Research and Special Programs Administration of the DOT has determined that the use of nitrogen refrigerated liquid charged “dry shipper” containers for the shipment of samples falls within the regulation exception provided in 49 CFR 173.30 paragraph (a) of the section states the requirements of this subchapter do not apply to atmospheric gases and helium when used

in the operation of the process system, such as a refrigeration system. Paragraph (c) of 173.320 pertains to air transport of same refrigeration system. For exception status of air shipments please refer to IATA-Dangerous Goods Regulations for nitrogen-refrigerated liquid. This falls in the class of 2.2 non-flammable gas, packing instructions 202 with special provisions A-800. For answers to questions regarding shipping regulations contact a Chart/MVE, Bio-Medical Technical Service Representative.

Once the LN2 is absorbed into the vapor shipper it cannot be reliquified, so LN2 in an absorbed state is not considered a hazardous material. With that being said, the container should not bear the liquid nitrogen label.

Although it is not required that vapor shipper dewars be shipped in the plastic shipping container it is highly recommended to reduce the possibilities of damage or tipping.

It is also important to remember that even armed with all the letters, proper identification and shipping regulations; the pilot has the last say whether a vapor shipper is loaded onto his aircraft.

Three Tube Sensor Assembly

Requests for a three tube temperature sensor assembly in place of the dual tube assembly must be made at the time of order. Failure to comply will result in the three tube assembly being shipped separately and charged at full price. If requested at the time the sales order is placed, the dual tube assembly will be replaced with the 3 tube sensor assembly at no additional cost to the customer.

P/N	Old Naming Convention	New Naming Convention
11793350	All 1500s and 800s except 810 and 810F	All 1500s and 800s except 811 and 811F
11793368	All 1800s except 1830 2004s and 1841s	All 1800s except 1851s and 1839s
11793341	1830 2004s	1851s

New Repair Program Pricing

NOTE: MVE-Chart will not decontaminate any freezer on receipt. We will not accept delivery of any unit for which a declaration of decontamination has not been received prior to shipment.

NOTE: Remove canister and cork and cover before shipping.

NOTE: MVE-Chart cannot repair non-MVE vapor shippers.

NOTE: New repair program pricing begins September 1, 2006

Aluminum Chart Dewars

LEVEL I	INSPECTION/SCRAP FEE PN 10643712 \$50.00 • MASS SPEC
LEVEL II	REVAC ONLY PN 10643739 \$225.00 • INSPECTION • RE-EVACUATION • LIQUID TEST (NER) • 1 YEAR VACUUM WARRANTY • 3 WEEK TURNAROUND
LEVEL III	COMPLETE REPAIR PN 10643739 \$325.00 • INSPECTION • RE-EVACUATION • LIQUID TEST (NER)

- PAINT
- NEW LABELS
- NEW CORK/COVER
- 1 YEAR VACUUM WARRANTY
- 4 WEEK TURNAROUND

LEVEL IV NON-MVE MANUF'D DEWAR PN 10910201 \$325.00
 • INSPECTION
 • RE-EVACUATION OF VACUUM SPACE
 • NO WARRANTY
 • PAINT (additional \$75.00)

Stainless MVE Freezers

INSPECTION FEE/SCRAP FEE..... \$250.00
 Charged only if freezer is not repaired. Waved if Chart repairs unit.

LEVEL I REVAC ONLY..... \$1050.00
 • TEST REPAIR
 • LN2 TEST
 • REVAC
 • 1 YEAR VACUUM WARRANTY
 • An additional charge of \$250.00 applies if cabinet has to be removed and reinstalled

LEVEL II COMPLETE REPAIR/COSMETIC \$1300.00
 • LN2 TEST
 • REVAC
 • MASS SPEC
 • 2ND NER TEST
 • BUFFING AND CLEANING
 • 1 YEAR VACUUM WARRANTY
 • No electrical work or parts are included (additional charge will apply if needed)

LEVEL III REPAIRS INVOLVING CUT APART
 • XLC-611 AND SMALLER..... \$1800.00
 • XLC-800 AND LARGER..... \$2600.00
 • ELECTRICAL AND PLUMBING PARTS ADDITIONAL.

Return Instructions:

When returning units to MVE for rehab, repair, or testing, the following must be posted on the outside of the shipping carton or sent directly to the Chart/MVE customer service representative issuing the RMA:

THE INTERNAL AND EXTERIOR OF THIS UNIT WERE CLEANED WITH SOLUTION THAT CONTAINED A GERMICIDE OR EQUIVALENT IN ACCORDANCE WITH D.O.T. AND C.D.C. REGULATIONS.

This process consists of cleaning the inside and outside surfaces of the unit with a solution equivalent to at least 10% chlorine bleach and 90% water. The surfaces can be sprayed or flushed with the solution. Failure to comply will result in a refusal and an immediate return of your unit.

Refurbished Aluminum Units

Aluminum Units in Stock as of 8/23/06

Sale Prices—No Other Discounts Applicable

Warrenty: 1 YEAR VACUUM

QTY	PN#	DESCRIPTION	SELLING PRICE
1	10725451R	RPL SC 20/20	\$ 426.00
2	991800R	RPL SC 3/3	\$ 344.00
34	11837869R	RPL ET 23 JLM "used"	\$ 390.00
12	11507886R	RPL DOBLE 11	\$ 422.00
7	991849R	RPL SC 11/7	\$ 335.00
9	991847R	RPL SC 4/2V	\$ 428.50
10	10817330R	RPL SC 4/3V	\$ 428.50
1	11736179R	RPL SPECTRUM 8	\$ 335.00
12	11736187R	RPL SPECTRUM 12	\$ 340.00
1	991806R	RPL XC 33/22	\$ 375.00
1	11052674R	RPL CRYO SYSTEM 8	\$ 500.00
8	11798273	Cryo Shipper XC Dewar	****

**** check w/Bruce / Dino for price
No C/C or protective carton

NEW UNITS/SLOW MOVERS IN NA BRANCH

Warrenty: 5 YEAR VACUUM

QTY	PN#	DESCRIPTION	DISTRIBUTOR PRICING
3	11702745	SC 16/11 No Labels	\$ 739.50
1	9920829	TECH 35	\$1783.00
4	10979435	Cryo Shipper Mini	\$1777.00
1	9918519	SC 16/11	\$1275.00
3	12923591	EZ Shipper	\$1165.00
1	11534593	SC 3/3 No Labels	\$420.84

Customer/Technical Info

For copies of past Tech Tips or for more information on maintaining nitrogen storage system please contact Technical Service:

USA: 800 482 2473

Europe: +44 1344 403100

Asia/Australia: +61 297 494333