

MVE

Tech Tips



A monthly publication for the MVE Biological Products Distributors

There are two main issues that will be addressed in this months Tech Tips. Each is a topic that some or all of our customers have inquired about.

1. DECONTAMINATING UNITS – XLC Freezers

The first and most important of these issues is the matter of decontamination of returned units to the factory. In the past, MVE held this issue in a low priority. The customer would decide to either decontaminate the unit themselves or MVE would do it in-house and charge the customer. As of June 1, 2000, MVE will no longer offer to decontaminate the unit for the customer. A new return protocol will be in place and must be followed if unit is to be accepted into our shipping docks. The following is a copy of the fax that is sent out.

DECONTAMINATION OF RETURNING UNITS

An RMA Number will be issued only after receipt of this signed document.

Preparing the Shipment:

When returning units to Chart/MVE for repair, rehab or testing the following decontamination procedure must be performed prior to shipping your unit to Chart/MVE:

1. Clean the inside and outside surfaces of the unit with a solution equivalent to at least 10% chlorine and 90% water. (*this can be sprayed or flushed*)
Rinse inner with water and dry.
The internal and exterior of this unit were cleaned with a solution that contained an approved germicide or equivalent in accordance with D.O.T. and C.D.C. regulations.

Model: _____ Serial# _____

Signed by: _____ Date: _____

2. Notify Chart/MVE by faxing this signed form confirming the above procedure has been performed. **Fax correspondence attn: Chart/MVE/CRYO-BIO Customer Service @ 800-232-9683**

The RMA number to reference for your repair is _____. (customer service to fill in)
After being issued an RMA number, you may return unit to:

CHART INDUSTRIES/MVE, INC
I-575, Airport Drive Exit
Canton, Ga. 30114
770-479-6531

Failure to comply with this procedure will result in the refusal and immediate return of your unit.

2. OBSOLETE XLC FREEZER HINGES

The manufacturer has discontinued the hinge that has been used for many years on XLC 1840/1841, 1110, 1200 and similar ancestral models of the XLC line.

The part numbers that are still active on our history files but no longer on current material bills are:

Part Number	Color	Usage
4510489	Teal	Early XLC-1840
4510489	Tan	XLC-1110
4510499	Gray	A-4500
10589621	Green	Early XLC 1840/1841 Models
10764653	Blue	Latest Vintage XLC-1841 Models
10831001	White	Latest Vintage XLC-1200
11046362	Charcoal	Bio Series

Note: PN 10831001 was installed on XLC-1200 modes until 2/9/00.

If a unit is in need of replacement hinges; all units originally equipped with one of the P/N's listed above, will need to have hinges replaced with hinge part number 10772670 and hinge retrofit kit Wagner to Frigidaire part number 110876666. You will need to order one kit for each hinge that you order. Instructions for installation are included with each kit. Installation instructions are shown attached.

UNITS AFFECTED

This kit and procedure applies to XLC freezers originally equipped with modified FRIGIDAIRE hinges. MVE P/N's listed below. Others may apply.

4510489	4510499	4510639
10589621	10764653	10831001
11046362		

PARTS SUPPLIED

ITEM #	PART NUMBER	DESCRIPTION	Qty
	11087658	INSTRUCTIONS HINGE RETROFIT	1
1	11087210	PLATE ADAPTER HINGE FREEZER SIDE	1
2	11087228	PLATE ADAPTER HINGE LID SIDE	1
3	11087236	STUD CLINCH FL HD #10-32*1/2"L	6
4	11087261	PHILLIPS FLAT HEAD SCREW CS #10-32*1/2"L 80 DEG	2
5	2914351	LOCKNUT SS #10-32	6
6	2915841	PHILLIPS PAN HEAD SCREW SS #10-32*1/2"LG	6
7	11087674	LOCTITE 242 0.5ML SINGLE USE	1

NOTE: Some items are pre-assembled. Hinges are not included in the kit they must be ordered separately. One kit required for each hinge.

TOOLS REQUIRED

Phillips Screwdriver (#2)
Flathead Screwdriver (1/4" wide minimum)
Ratchet
" Deep well socket
3/8" Socket

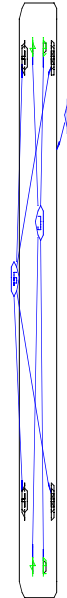
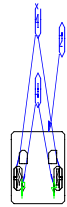
Extension for ratchet
Spacers as needed to position the lid
Rubber mallet
An assistant may be required for some parts of this procedure.

GENERAL

This procedure describes the process of fitting the Wagner freezer hinge in place of the original equipment modified FRIGIDAIRE hinge on your XLC freezer or any other freezer model equipped with the hinges indicate above.

PROCEDURE

NOTE: You may wish to measure and record the distance between the lid and the top of the tank/cabinet before starting to insure that proper alignment and position is obtained after the installation.



- 1 Place the lid in the closed position.
- 2 Remove spring pressure from the original hinge by loosening the _" nut on the rod inside the hinge body that retains the spring. If desired, the entire rod and spring assembly may be removed.

NOTE: An assistant may be required to hold the lid in the open position when removing the spring. Once spring pressure is removed from the hinges, the lid will fall into the closed position with sufficient force to cause injury if care is not taken when lowering the lid.
- 1 Remove screws securing hinges to the freezer and lid to allow removal of the entire hinge.
 - 1.1 Any spacers/shims used in the original installation should be retained and labeled if necessary as to their original position.

NOTE: Do not completely tighten any of the fasteners used in the following steps until all fasteners are in place and hinge and lid are positioned properly relative to the tank/cabinet. Fasteners should be snug, but loose enough to allow sliding of the hinge and plates to position the lid properly.

Figure 1, Adapter plates

- 1 Attach the lid adapter plate, item 2, to the lid in the orientation shown in figure 1, using the countersunk #10-32 x _" screws, item 4, in the countersunk slots as shown. Use a drop of LOCTITE; item 7, on the threads. Do not tighten these screws at this time.
- 2 Attach the cabinet/tank adapter plate, item 1, to the cabinet/tank in the orientation shown in figure 1 using the pan head #10-32 x _" screws, item 6, in the slots as shown. Use a drop of LOCTITE; item 7, on the threads. Any spacers/shims removed earlier with the original hinges should be re-installed in their original locations between the adapter plate and the tank/cabinet. Do not tighten these screws at this time.
- 3 Remove spring pressure from the replacement hinge by loosening the _" nut on the rod inside the hinge body that retains the spring. If desired, the entire rod and spring assembly may be removed.

- 1 Attach the top portion of the replacement hinge (ordered separately) to the lid as shown in figure 2 using locknuts, item 5, on pre-installed studs, item 3. Do not tighten nuts at this time.
- 2 Install pan head #10-32 x $\frac{1}{2}$ " screws, item 6, in the upper slots of the top portion of the hinge as shown in figure 2. These screws should extend through the slots of the hinge and the adapter plate item 2. Use a drop of LOCTITE; item 7, on the threads. Do not tighten these screws at this time.
- 3 Place the body (lower portion) of the replacement hinge over the studs, item 3, on the cabinet/tank adapter plate, item 1, already attached as shown in figure 2
- 4 Secure the body of the hinge to the adapter plate using the locknuts, item 5, on pre-installed studs, item 3. Do not tighten nuts at this time
- 5 Place spacers as required to position the lid at the proper distance above the tank/cabinet as measured before disassembly, or simply to obtain a consistent distance.
- 6 Align the lid with the top of the tank/cabinet. It will be necessary to tap on the lid and or the hinges with the mallet to move the lid into position
- 7 Tighten all fasteners at this time to prevent further movement.
- 8 If the spring and rod assembly was removed from the hinge for installation, re-install it at this time.

NOTE: an assistant may be required to hold the lid in the open position while re-installing the spring.

- 1 Using the $\frac{1}{2}$ " deep well socket, increase spring pressure until the hinges will hold the lid at approximately a 45° position.
- 2 Make sure that the spring pressure is balanced between the hinges by measuring the distance between the bottom of the hinge body and the plastic spring follower inside the body. Failure to balance the spring pressure will unequally load the hinge attachment points and can result in premature failure of the hinges and or the lid.
- 3 The installation is complete. The old hinges should be discarded.

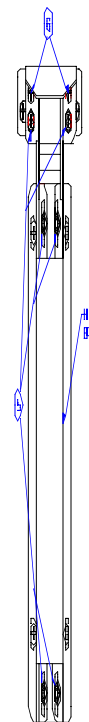


Figure 2, Installed Hinge

For more information on maintaining your nitrogen storage dewars please contact Jim Bachman at (612) 758-8520, pager- (612) 579-8367 fax- (612)758-8224.

For copies of past Tech Tips or for more information on maintaining your nitrogen storage dewars please contact Jim Bachman at (612) 758-8520, Pager (612) 579-8367, Fax (612) 758-8224.

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