



TECHNICAL BULLETIN : SERVICE INFORMATION / RETROFIT / UPGRADE

ULT Freezer Preventative Maintenance

Your Ultra Low Freezer has been tested before shipment. Regular preventative maintenance is important to keep your unit functioning properly. The operator should perform routine cleaning and maintenance on a regular basis. For maximum performance and efficiency, it is recommended that the unit be checked and calibrated periodically by a qualified service technician.

The following is a condensed list of preventive maintenance requirements:

1. Clean the condenser filter:
Clean condenser filter every two to three months
More often if the laboratory area is dusty.
2. Clean the Condenser coil:
Clean the condenser assembly at least once every year depending upon the environmental conditions.
3. Cleaning Door Gaskets (minimum monthly):
Check the door gaskets around the door for punctures or tears.
Leaks are indicated by a streak of frost which forms at the point of gasket failure.
Use a cloth to remove any frost build-up from the gasket and door(s).
The door gasket may need to be cleaned more frequently if dirt or excessive frost build-up prevents the door from closing properly.
4. Back up Battery Replacement:
Have a certified technician replace the alarm battery every two and a half years.
Check the battery life by entering function codes (Qualified technicians please contact NuAire Service Department for procedure).
5. Removal of Frost/Ice Build-up:
The inner chamber will build up frost/ice as the usage increases; you will have to periodically scrape frost/ice off of doors and inner chamber.
Not doing so can harm the door gaskets, inner/outer door handles and affect the performance of your system.

Tips to minimize ice build-up inside of the freezer:

1. Locate the freezer away from drafts or heating/cooling vents.
Keep the number of door openings to a minimum.
2. Minimize the length of time door is open.
3. Make sure door latches securely after opening.

Note: Adjust door handles for firm latching, if the frost/ice build-up has been excessive it may bend or move the position of the door handles, attention will be needed if user did not perform proper frost/ice removal.

Vacuum Relief Port (if applicable):

The exterior door gasket provides an excellent seal that protects product, provides energy efficient thermal barrier to keep cold air in and room temperature out and reduces frost build-up on the inner doors. Because the door gasket seals so well, a vacuum can be created after a door opening. Warm air enters the cabinet, cools and contracts, creating a vacuum that pulls the door in tightly against the seal. It is very important that you monitor this relief port and remove frost/ice build-up as needed. Not doing so may increase the amount of time to re-enter the unit's chamber. Cleaning may need to be performed more often depending on amount of door openings and high humidity environments.

1. Calibration:

Calibration service should be performed yearly by a qualified service technician.

This is necessary to follow good storage practices and compliance with your local regulatory companies.

Calibration should be performed by placing a NIST probe in the geometric center of chamber.

2. Defrosting the Chamber:

The chamber should be defrosted at least twice a year depending on usage and environmental conditions.

To perform this function:

Remove all product and place it in another freezer.

Turn the unit off along with the battery switch.

Open all doors and allow unit to defrost.

3. Wipe unit out with a non-chloride detergent.

4. Allow the freezer to operate empty overnight before reloading with product.

Note: Recommended ambient conditions for our units are from 5 – 35 degrees C (40 to 90 degrees F) and 80% humidity.

Not following these parameters will affect the performance of your unit.