
LARGE CAPACITY INCUBATOR

Installation, Operation and Maintenance Instructions

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GENERAL

INSPECTION

When the equipment is received, all items should be carefully checked against the bill of lading to insure all crates and cartons have been received. All units should be inspected for concealed damage by uncrating the units immediately. If any damage is found, it should be reported to the carrier at once, and a claim should be filed with the carrier. This equipment has been inspected and tested in the manufacturing facility and has been crated in accordance with transportation rules and guidelines. Manufacturer is not responsible for freight loss or damage.

LOCATION

The cabinet should also be leveled when it is placed in its permanent location. Do not stack items on top of the unit. Vibration during shipping and handling may loosen mechanical connections. Check all connections during installation. Check all wiring and fasteners.

CAUTION

- Do not modify cabinet construction or associated equipment assemblies.
- Do not remove labeling or information supplied with the unit.

Observe all Warning Labels. Disconnect power supply to eliminate injury from electrical shock or moving parts when servicing equipment.

INSTALLATION

Door Alignment - If for some reason the doors are not squared up on the cabinet, the doors can be adjusted. Opening the door(s) and loosening the screws that hold both the top and bottom hinges to the cabinet can accomplish this. After adjusting the door so that it is aligned correctly, tighten the screws to securely hold the hinges in place.

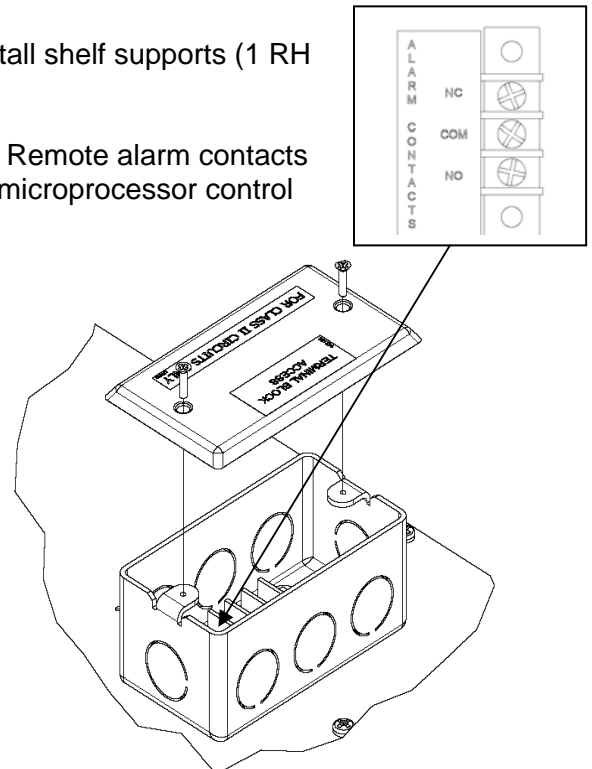
Shelving Installation - Locate shelves inside cabinet, install shelf supports (1 RH support, 1 LH support per shelf.)

Remote Alarms Contacts Access - The factory installed Remote alarm contacts access box is located at the top of the cabinet behind the microprocessor control (see illustration.)

1. Remove the cover to access the terminal connections.
2. Select and knock-out a hole to run field leads into electrical box terminals.
3. The terminal block in the electrical box is labeled for "normally open" and "normally closed" activation. End user is responsible for proper field installation.

Terminal connections are rated for class II circuits only per NEC table 11(A). (Limited power source less than 30vac 8 Amp. max, see applicable notes in NEC).

2-10 volt DC Output – Terminal board for 2-10v DC Output for temperature re-transmit is located behind the cabinet façade, next to Remote Alarm access box. Connect wires as per label.



RS485 port - (Optional) terminal board for RS485 port is located behind the cabinet façade, next to the Remote Alarm access box, connect wires as per label.

Duplex, or European Outlet 4 Amp Max. – (Optional) is located near the back of the left hand interior wall, 20" from the cabinet interior floor. Outlet is wired thru main cabinet power supply, and includes a 4 amp, MANUAL RESET, circuit breaker. Breaker is located behind façade, on the side of the control box.

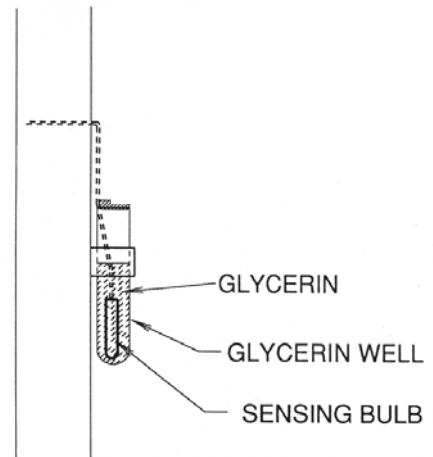
Access Port - (Optional) 2" port is provided with a spring loaded, exterior cover, RH or LH side of the cabinet.

GLYCERIN WELL ASSEMBLY

Important: For accurate product temperature reading, the product-sensing bulb must be immersed in glycerin solution contained in the provided well.

One glycerin well is furnished with each model. The purpose of the glycerin is to simulate the product stored in the Incubator. The glycerin temperature reflects the product's temperature during normal operation.

After the unit is put into operation, check to make sure that the temperature indicating or alarm sensing bulb is positioned inside the glycerin well as far as possible without touching the well itself.



OPERATION

The Large Capacity Incubator is designed for an operating range of 5°C above room ambient to 70°C and is intended for indoor use only. A transverse blower optimizes airflow and ensures tight temperature uniformity.

These units employ a programmable controller to control the temperature and CO₂ option. The controller is located on the facade of the unit. Please see the separate instructions, part number 113635, on the operation of the controller used in the Large Capacity Incubator.

The Incubator utilizes an electrically operated heater to warm the cabinet. The programmable control is factory set with a cutout temperature of 70°C (158°F) to prevent the cabinet from exceeding its design limitations.

NOTE: The cabinet is equipped with two switches located on the façade. One is the main power ON/OFF switch for the unit. The other is a three-position switch for the battery-powered alarm. The alarm switch is placed in the middle, or OFF position, for shipment. When the Large Capacity Incubator is put into operation, the top of the switch should be pushed in to the ON position. With the switch in the ON position, the battery will sound the alarm if the main power to the cabinet is interrupted. The switch flipped to the bottom position is used to test the battery. This test must be done with power uninterrupted to the cabinet. The alarm will sound if the battery is good. This test should be done periodically. The battery is located on the control box that is on top of the unit behind the façade.

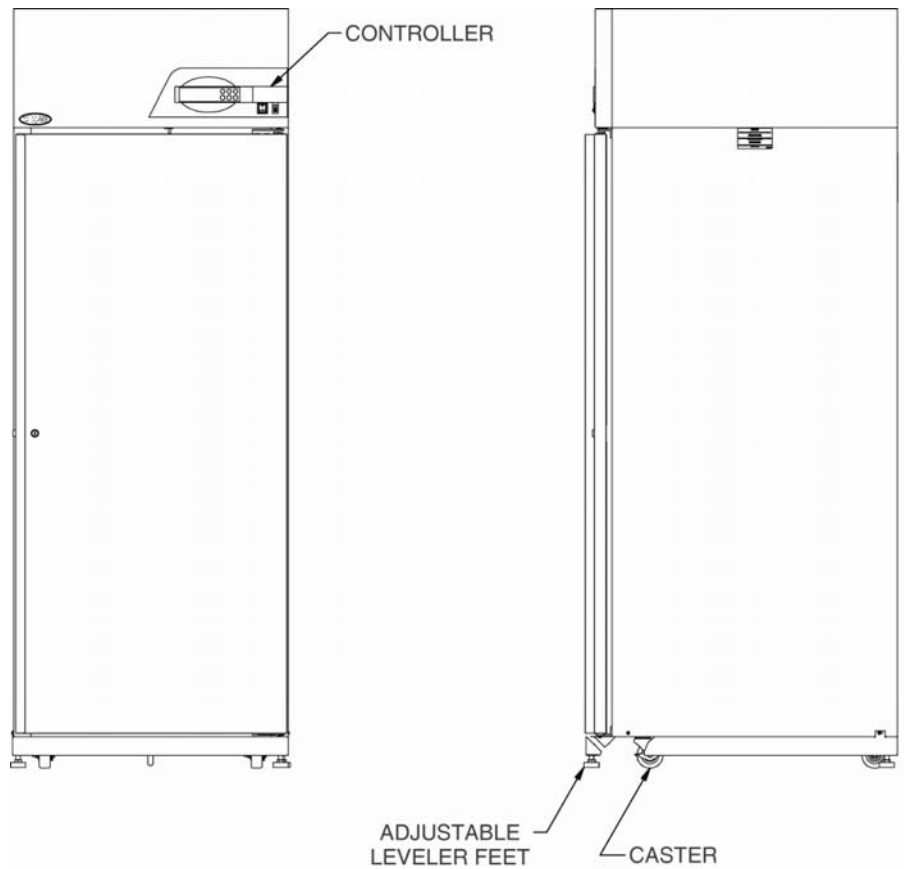


Figure A

DRAWER OPTION

The Large Capacity Incubator is offered with drawers as an option.

Drawer Removal – The Large Capacity Incubator may accommodate up to eight drawers. To remove the drawers for cleaning, locate the black release tabs found on the inside front of the drawer. See Figure C. Push the release tabs on each side inward and lift up the drawer. Slide the drawer towards you and remove.

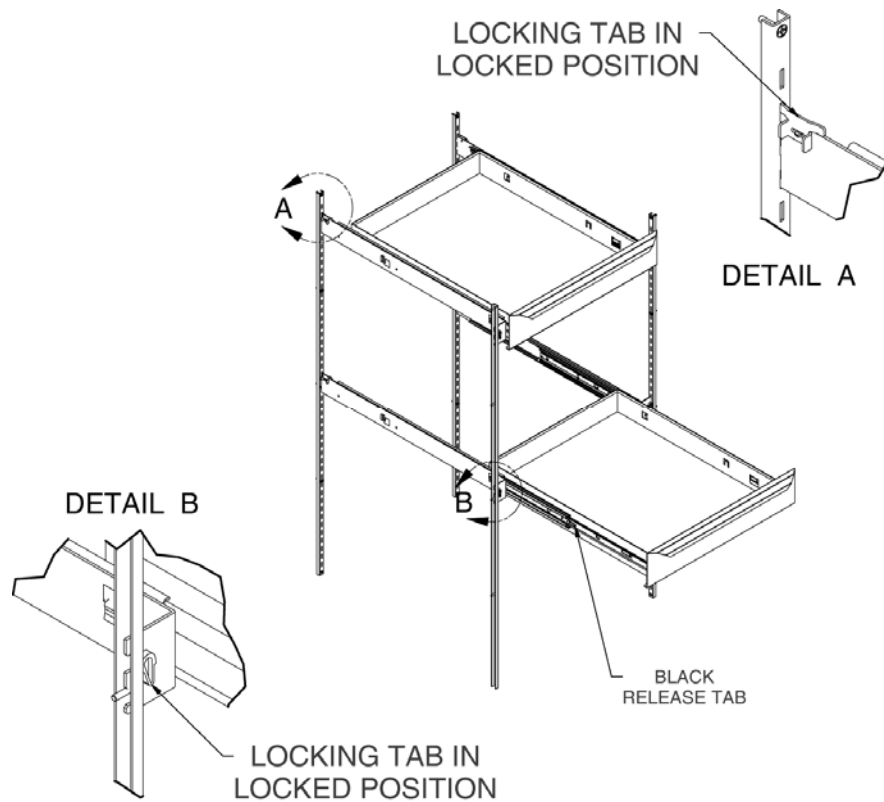


Figure C

Drawer Slide Removal/Adjustment – Each drawer slide is independently removable and can be adjusted to different levels. First remove the drawer per above instructions. Release the locking tabs located on the drawer slide, move the front tab up and release the tab in the back of the cabinet, by sliding the locking tab towards the front. See illustration. Unhook the drawer slide assembly from both the front and back shelf standards by lifting up on the assembly.

To install a drawer slide, reverse the process used to remove the slide. Secure the locking tabs into position after the drawer slide assembly is in place. Reinstall the drawer.

MAINTENANCE

PERIODIC CLEANING

Beginning with the initial installation, the interior surfaces of the cabinet should be periodically wiped down with a solution of warm water and baking soda. This solution will remove any odors from spillage that has occurred. The exterior of the cabinet should also be cleaned frequently with a commercial grade of glass cleaner. **Caution: Do not use an abrasive or alkaline solution.**

All moving parts have been permanently lubricated and will generally require no maintenance.

MAINTENANCE SERVICE AND ANALYSIS GUIDE

<u>MALFUNCTION</u>	<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
No power to optional duplex receptacle	<ol style="list-style-type: none">1. Internal circuit breaker tripped2. Wiring incorrect	<ol style="list-style-type: none">1. Reset circuit breaker2. Check wiring against the diagram
Heater inoperative	<ol style="list-style-type: none">1. High limit thermostat tripped2. Wiring incorrect	<ol style="list-style-type: none">1. Manually reset thermostat2. Check wiring against diagram
No power to cabinet	<ol style="list-style-type: none">1. Service cord unplugged2. Circuit breaker supplying main electrical receptacle tripped3. Wiring incorrect4. Main cabinet power switch off	<ol style="list-style-type: none">1. Plug in service cord2. Determine reason and correct3. Check wiring against diagram4. Turn on power switch
Objectionable noise	<ol style="list-style-type: none">1. Vibrating fan blade2. Worn fan motor bearings	<ol style="list-style-type: none">1. Replace fan blade2. Replace fan motor