



LABCONCO CORPORATION

8811 Prospect Avenue
Kansas City, MO 64132
(800) 821-5525, (816) 333-8811
(816) 363-0130 fax
labconco@labconco.com

User's Manual

Purifer[®] Non-Ventilated PCR & Tissue Culture Enclosures

Models

3951400
3951420
3952400
3952420

To receive important product updates,
complete your product registration card
online at register.labconco.com

Please read the User's Manual before operating the equipment.

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Warranty

Labconco Corporation provides a warranty to the original buyer for the repair or replacement of parts and reasonable labor as a result of normal and proper use of the equipment with compatible chemicals. Broken glassware and maintenance items, such as filters, gaskets, light bulbs, finishes and lubrication are not warranted. Excluded from warranty are products with improper installation, erratic electrical or utility supply, unauthorized repair and products used with incompatible chemicals.

The warranty for Purifier® Non-Ventilated PCR & Tissue Culture Enclosures will expire one year from date of installation or two years from date of shipment from Labconco, whichever is sooner. Warranty is non-transferable and only applies to the owner (organization) of record.

Buyer is exclusively responsible for the set-up, installation, verification, decontamination or calibration of equipment. This limited warranty covers parts and labor, but not transportation and insurance charges. If the failure is determined to be covered under this warranty, the dealer or Labconco Corporation will authorize repair or replacement of all defective parts to restore the unit to operation. Repairs may be completed by 3rd party service agents approved by Labconco Corporation. Labconco Corporation reserves the rights to limit this warranty based on a service agent's travel, working hours, the site's entry restrictions and unobstructed access to serviceable components of the product.

Under no circumstances shall Labconco Corporation be liable for indirect, consequential, or special damages of any kind. This warranty is exclusive and in lieu of all other warranties whether oral, or implied.

Returned or Damaged Goods

Do not return goods without the prior authorization from Labconco. Unauthorized returns will not be accepted. If your shipment was damaged in transit, you must file a claim directly with the freight carrier. Labconco Corporation and its dealers are not responsible for shipping damages.

The United States Interstate Commerce Commission rules require that claims be filed with the delivery carrier within fifteen (15) days of delivery.

Limitation of Liability

The disposal and/or emission of substances used in connection with this equipment may be governed by various federal, state, or local regulations. All users of this equipment are required to become familiar with any regulations that apply in the user's area concerning the dumping of waste materials in or upon water, land, or air and to comply with such regulations. Labconco Corporation is held harmless with respect to user's compliance with such regulations.

Contacting Labconco Corporation

If you have questions that are not addressed in this manual, or if you need technical assistance, contact Labconco's Customer Service Department or Labconco's Product Service Department at 1-800-821-5525 or 1-816-333-8811, between the hours of 7:30 a.m. and 5:30 p.m., Central Standard Time.

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CHAPTER 1

INTRODUCTION

Congratulations on your purchase of a Labconco Purifier® Passive PCR Enclosure or Purifier Tissue Culture Enclosure. Your **non-ventilated** enclosure is designed to reduce cross-contamination in laboratory applications.

The Purifier Passive PCR Enclosure and Purifier Tissue Culture Enclosure offer a UV light for disinfecting the interior and an interior switched electrical outlet. The Purifier Passive PCR Enclosure UV light has the added feature of a digital timer to accommodate PCR protocol. To take full advantage of all the features, please acquaint yourself with this manual and keep it handy for future reference.

Polymerase Chain Reaction (PCR)

Definition

Polymerase Chain Reaction (PCR), is a laboratory process in which a particular DNA segment from a mixture of DNA chains is rapidly replicated, producing a large, readily analyzed sample of a piece of DNA. In PCR, DNA is immersed in a solution containing the enzyme DNA polymerase, unattached nucleotide bases (the subunits that DNA is composed of), and “primers”, short sequences of nucleotides designed to bind with an end of the desired DNA segment. Two primers are used: one primer binds at one end of the desired segment on one of the two paired DNA strands and the other primer binds at the other end but on the other strand. The solution is heated to break the bonds between the strands of the DNA. When the solution cools, the primers bind to the separated strands, and DNA polymerase quickly builds a new strand by joining the free nucleotide bases to the primers. When this process is repeated, a strand that was formed with one primer binds to the other primer, resulting in a new strand that is restricted solely to the desired segment. Thus, the region of DNA between the primers is selectively replicated. Further repetitions of the process can produce billions of copies of a small piece of DNA in several hours. PCR was developed in 1985 by Kary B. Mullis, who was awarded the 1993 Nobel Prize in chemistry for his work. It is used in a broad

range of applications from DNA fingerprinting to medical tests to identify diseases from the infectious agent's DNA. See also nucleic acid. *The Concise Columbia Encyclopedia* is licensed from Columbia University Press. Copyright © 1995 by Columbia University Press. All rights reserved.

About This Manual

This manual is designed to help you learn how to install, use, and maintain your non-ventilated enclosure. Instructions for installing optional equipment on your enclosure are also included.



If the unit is not operated as specified in this manual it may impair the protection provided by the unit.

Si l'unité n'est pas utilisée comme spécifié dans ce manuel il peut diminuer la protection fournie par l'unité.

Chapter 1: Introduction provides a brief overview of the non-ventilated enclosure, explains the organization of the manual, and defines the typographical conventions used in the manual.

Chapter 2: Prerequisites explains what you need to do to prepare your site before you install the enclosure. Electrical and service requirements are discussed.

Chapter 3: Getting Started contains the information you need to properly unpack, inspect and install the enclosure.

Chapter 4: Features and Safety Precautions explains how the enclosure operates and the appropriate precautions you should take when using it.

Chapter 5: Using Your Enclosure discusses the basic operation of how to prepare, use and turn off your non-ventilated enclosure is included.

Chapter 6: Maintaining Your Enclosure explains how to perform routine maintenance.

Chapter 7: Accessorizing Your Enclosure explains acceptable modifications or how to add accessories.

Chapter 8: Troubleshooting contains a table of problems you may encounter while using the product including the probable causes of the problems and suggested corrective actions.

Appendix A: Components contains labeled diagrams of all of the components of the enclosures.

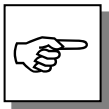
Appendix B: Dimensions show all of the dimensions for the enclosures.

Appendix C: Specifications contains the electrical requirements. Wiring diagrams are also included in this section.

Typographical Conventions

Recognizing the following typographical conventions will help you understand and use this manual:

- Book, chapter, and section titles are shown in italic type (e.g., *Chapter 3: Getting Started*).
- Steps required to perform a task are presented in a numbered format.
- Comments located in the margins provide suggestions, reminders, and references.
- Critical information is presented in boldface type in paragraphs that are preceded by the exclamation icon. Failure to comply with the information following an exclamation icon may result in injury to the user or permanent damage to the enclosure.
 - Critical information is presented in boldface type in paragraphs that are preceded by the wrench icon. A trained certifier or contractor should only perform these operations. Failure to comply with the information following a wrench icon may result in injury to the user or permanent damage to your hood.
 - Important information is presented in capitalized type in paragraphs that are preceded by the pointer icon. It is imperative that the information contained in these paragraphs be thoroughly read and understood by the user.
 - The PCR icon indicates the text is specific to the Purifier PCR Enclosure.
 - The TC icon indicates the text is specific to the Purifier Tissue Culture Enclosure.
 - CAUTION – See Manual. When this symbol is on the unit it indicates a caution that is detailed in this manual.
 - ATTENTION - Voir manuel. Lorsque ce symbole est sur l'unité, il indique une mise en garde qui est indiqué dans ce manuel.



CHAPTER 2

PREREQUISITES

Before you install the enclosure, carefully examine the location. You must be certain that the area is level and of solid construction. In addition, a dedicated source of electrical power should be located near the installation site to power the enclosure.

Carefully read this chapter to learn the requirements for your installation site:

- The support requirements.
- The location and air current requirements.
- The electrical power requirements.
- The space requirements.

Support Requirements

At a minimum, the supporting structure usually consists of a base cabinet and chemically resistant work surface. A mobile stand or cart is allowable. See Chapter 7 for accessory work surfaces, stands, mobile stands and cabinets.

Location and Air Current Requirements

The Purifier Passive PCR and Purifier Tissue Culture Enclosures have been designed to reduce cross drafts and air circulation with the sash and UV sash closure panel installed. However, as a precautionary measure of safety and a higher level of quality management, it is recommended that the enclosure be placed in such an area away from:

- High traffic areas where walking might cause an air disturbance.
- Overhead or wall HVAC diffusers, fans, radiators or other lab equipment producing air currents.
- Next to doorways or windows that may be opened.



Do not position the unit so that it is difficult to operate the main disconnect device.

Ne placez pas l'appareil de sorte qu'il est difficile de faire fonctionner le dispositif principal de déconnexion.

Electrical Requirements

Standard duplex electrical receptacles should be nearby for connecting the non-ventilated Purifier Passive PCR Enclosure or Purifier Tissue Culture Enclosure. For your convenience the enclosures have a switched auxiliary outlet receptacle. The auxiliary switched outlet is rated for either 115V, 8 amps or 230V, 4 amps.

Space Requirements

The dimensions for the non-ventilated enclosures are shown in *Appendix B: Enclosure Dimensions*.

CHAPTER 3

GETTING STARTED

Now that the site for your non-ventilated Purifier PCR or Purifier Tissue Culture Enclosures is properly prepared, you are ready to unpack, inspect and install your non-ventilated enclosure. Read this chapter to learn how to:

- Unpack and move the enclosure.
- Set up the enclosure with the proper supporting structure and work surface.
- Connect the electrical supply.
- Seal the enclosure to the work surface.

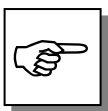
Depending upon which model you are installing, you may need wrenches, ratchets, sockets, a nut driver set, a flat-blade screwdriver, a Phillips screwdriver, and a carpenter level to complete the instructions in the chapter.



The enclosures weigh 100 lbs. (45 kg). The shipping container allows for lifting with a mechanical lift truck or floor jack. If you must lift the enclosure manually, follow safe-lifting guidelines. Do not lift by the front lower support.

Unpacking the Enclosure

Carefully remove the shrink-wrap or carton on the enclosure and inspect it for damage that may have occurred in transit. If damaged, notify the delivery carrier immediately and retain the entire shipment intact for inspection by the carrier.



DO NOT RETURN GOODS WITHOUT THE PRIOR AUTHORIZATION OF LABCONCO. UNAUTHORIZED RETURNS WILL NOT BE ACCEPTED.



IF ENCLOSURE WAS DAMAGED IN TRANSIT, YOU MUST FILE A CLAIM DIRECTLY WITH THE FREIGHT CARRIER. LABCONCO CORPORATION AND ITS DEALERS ARE NOT RESPONSIBLE FOR SHIPPING DAMAGES.

The United States Interstate Commerce Commission rules require that claims be filed with the delivery carrier within fifteen (15) days of delivery.

Do not discard the packing material until you have checked all of the components and tested the enclosure. We recommend that you do not remove the enclosure from its shipping container until it is ready to be placed into its final location. Move the unit by using a floor jack.



Do not move the enclosure by tilting it onto a hand truck.

Installing the Enclosure on a Supporting Structure and Work Surface

When installing the enclosure onto a chemically-resistant work surface or benchtop, ensure that the structure can safely support the combined weight of the enclosure and any related equipment. The work surface should be at least as wide and deep as the non-ventilated enclosure to properly support it. The front of the non-ventilated enclosure should be aligned within 1/8" of the front of the work surface. Mounting holes are provided in the Labconco accessory work surfaces to secure the enclosure.

Work Surface Specifications

The work surface should be smooth, rigid, and durable, such as a chemically-resistant epoxy resin. The surface should be non-porous and resistant to the materials used in conjunction with the Purifier PCR or Purifier Tissue Culture Enclosures. The work surface should also contain a dished recessed area for containing primary spills.

Work Surface and Non-Ventilated Enclosure Installation

1. Level the base cabinets and the work surface. Work surface should be placed flush with the front of the base cabinet as shown in Figure 3-1.
2. Position the work surface in its intended location and with the front of the work surface, (wide flange), towards you.
3. Secure the work surface to the base cabinet with a structural adhesive or silicone sealant.
4. Insert the supplied mounting screws in the four holes. Allow a minimum of 1/8" clearance under the head of the screw for positioning the enclosure.
5. Place the enclosure on the work surface and slide the rear flange and lower front bracket flanges under the mounting screw heads.
6. Tighten the four screws to complete the installation.

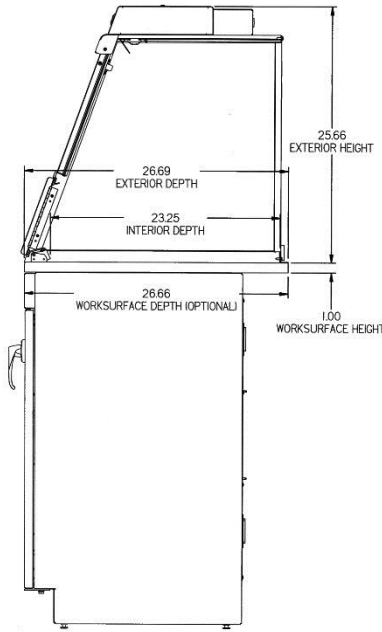


Figure 3-1
Side View of Typical Installation

Connecting the Electrical Supply

A grounded receptacle should be nearby for connecting the Purifier PCR or Purifier Tissue Culture Enclosures. Please review Chapter 2 for electrical prerequisites.



All wiring for the building electrical outlets *SHOULD* be performed by a licensed electrician and conform to all local codes.



Do not use any detachable power cord that is not adequately rated for the unit.

Ne pas utiliser un fil électrique amovible qui n'est pas de tension nominale de l'appareil.

Sealing the Enclosure to the Work Surface

When the enclosure has been set in place, it may be sealed at the work surface to prevent spilled materials from collecting under the walls. A bead of silicone sealant is recommended to seal it to the work surface.

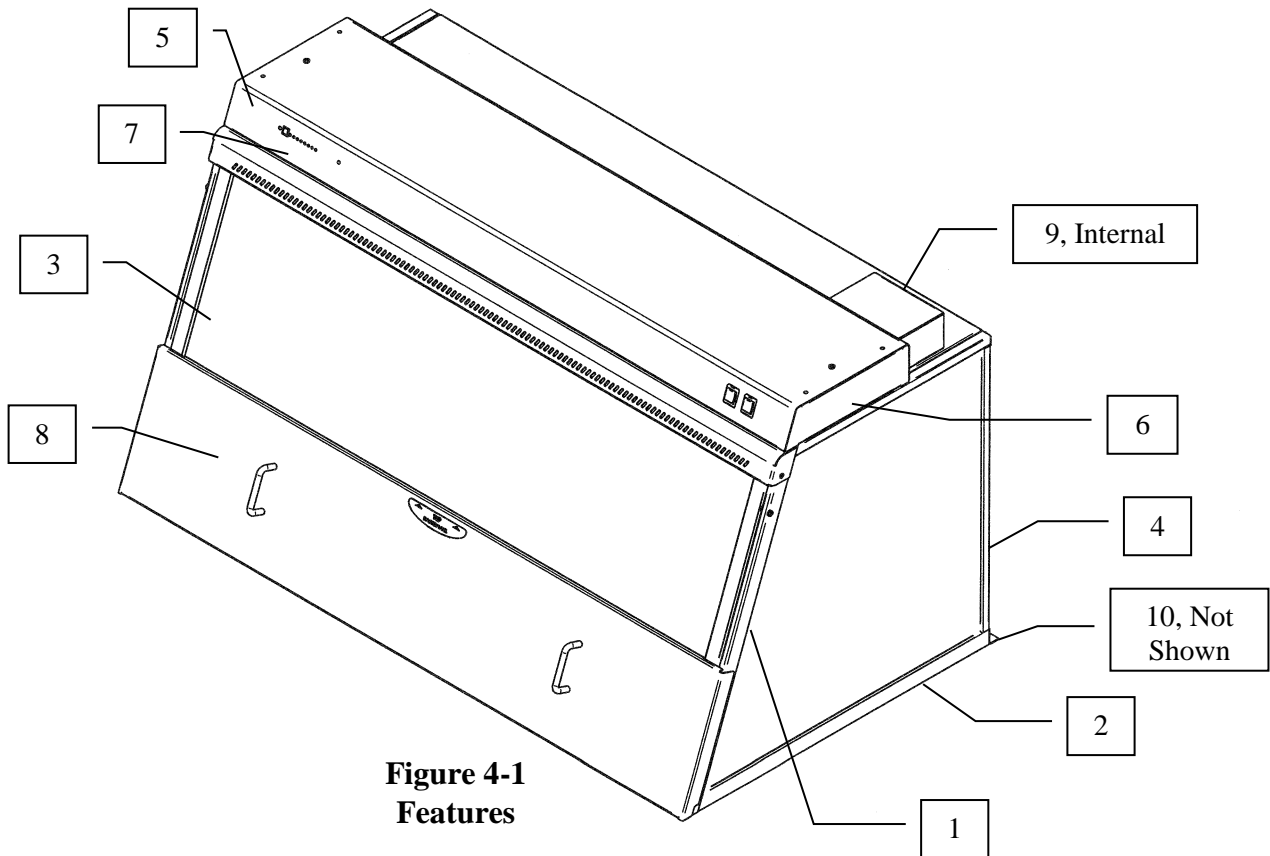
CHAPTER 4

FEATURES AND SAFETY

PRECAUTIONS

Features

Labconco engineered the Purifier Passive PCR Enclosure and Purifier Tissue Culture Enclosure to provide a **non-ventilated**, circulation-free work area to reduce cross-contamination in laboratory applications. A spacious interior and convenience outlet give ample room for media preparation and equipment used for procedures. A UV light with digital timer, included on the Purifier PCR Enclosure, provides decontamination control after PCR protocols are conducted. The Purifier Tissue Culture Enclosure may be used for techniques such as tissue staining, culture growth and virus harvesting. A built-in UV light on the Purifier Tissue Culture Enclosure provides secondary surface decontamination while the enclosure is not in use.



**Figure 4-1
Features**

1. **Ergonomic Slope and Front** of 20° provides maximum visibility, and comfort, reduces glare, thereby minimizing operator fatigue.
2. **Internal Depth of 23" and interior height of 22"** provides necessary depth and height to support procedures and other auxiliary equipment without extending outside the non-ventilated enclosure.
3. **Flush Sash** has a wiping seal and features a spring-loaded latch for loading auxiliary equipment. The sash pivots down for normal operation.
4. **Electrical Pass-Through Iris** allows electrical cords and data cords to pass through the back of enclosure. The unit ships with solid plugs and the iris plugs are included with the User's Manual for your convenience.
5. **Fluorescent Light** provides illumination for the interior of the enclosure.
6. **Ultraviolet Germicidal Light** provides surface decontamination and maintains sterility inside the enclosure. It is located above the work area.
7. **Variable PCR Digital UV Light Timer (Purifier PCR Enclosure only)** allows the operator to time the surface disinfection of the work area for PCR protocols. The UV light timer has eight settings of 5, 10, 15, 30, 60,

PCR

- 120, 240 minutes and infinitely ON. It is easily changed by selecting the time necessary on the control panel.
8. **UV Sash Closure Panel** provides added safety to prevent access and air currents inside the non-ventilated enclosure when the UV light is activated. The panel must be in place for the UV light to operate.
 9. **Switched Outlet** is located inside the non-ventilated enclosure for powering electrical equipment.
 10. **Accessory Work Surface** is dished to contain spills and is contoured to fit the dimensions of the non-ventilated enclosures.

Safety Precautions

1. Use good housekeeping in the enclosure at all times. Clean up spills immediately. Periodically clean all interior surfaces.
2. Do not work with hazardous volatile chemicals in this enclosure.
3. All acid use in this enclosure is prohibited.
4. Radioisotope materials are prohibited in this enclosure.
5. The use of safety goggles, protective clothing, gloves and any other personal protective equipment recommended by your safety officer should be used.
6. The sash should remain in the down position while using the enclosure.
7. Ensure the enclosure is connected to an electrical service in accordance with local and national electrical codes. Failure to do so may create a fire or electrical hazard. Do not remove or service any electrical components without first disconnecting from electrical service.
8. Ensure only trained operators use the non-ventilated enclosure. All users should review the User's Manual and become familiar with the operation.
9. Avoid direct exposure to ultraviolet (UV) radiation; NEVER work in the non-ventilated enclosure with the UV light on. Always use the UV sash closure panel in the closed position when using the UV light to provide added protection.

CHAPTER 5

USING YOUR ENCLOSURE

Planning

- Thoroughly understand procedures and equipment required before beginning work.
- Arrange for minimal disruptions, such as room traffic or entry into the room while the enclosure is in use.

Start-up

- Clean and surface disinfect the inside of the enclosure. Use UV light as required for protocol.
- Turn on the fluorescent light.
- Only raise the sash for loading.
- Wear a long sleeved lab coat and rubber gloves. Use protective eyewear. Wear a protective mask if appropriate. Consult your Safety Officer for additional personal protective equipment recommendations.

Work Techniques

- Keep all materials inside and perform all operations inside the work area.

Unloading Materials and Equipment

- All open trays, weigh vessels and containers should be covered before being removed from the enclosure.

Shutdown

- Turn off the fluorescent light and install the UV sash closure panel.
- Clean and surface disinfect the interior surfaces after completion.
- Turn on the UV light to decontaminate the work area as determined by your protocol.

CHAPTER 6

MAINTAINING YOUR ENCLOSURE

Now that you have an understanding of how to work in the non-ventilated enclosure, we will review the suggested maintenance schedule and common service operations.

Routine Maintenance Schedule

Weekly

- Clean the enclosure interior appropriate for the application.

Monthly (or more often as required)

- Using a cloth and glass cleaner, clean the exterior surfaces of the non-ventilated enclosure, particularly the front to remove any accumulated dust.
- All weekly activities.

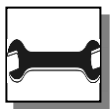
Annually

- Replace the UV lamp.
- Verify proper operation of the UV panel safety switch
- All monthly activities.



UV Light Replacement

1. Disconnect power.
2. Locate the UV lamp inside.
3. Rotate and remove the old UV lamp.
4. Reinstall the new UV lamp.
5. Switch unit on and try the new UV lamp (UV Closure Panel must be installed).



Fluorescent Light Replacement

1. Disconnect power.
2. Locate the two Phillips machine screws on top of the light and remove.
3. Gently lift up the light assembly and rotate it upside down to rest on top of the enclosure. Use caution when lifting and removing light assembly to prevent damage to UV closure panel sensor wire, sensor wire is attached between light assembly and enclosure.
4. Rotate and remove the old fluorescent lamp.
5. Reinstall the new fluorescent lamp, light and screws in reverse order. Use caution not to pinch or damage UV closure panel sensor wire.
6. Switch unit on and try the new fluorescent lamp.



THE LAMP(S) IN THIS PRODUCT CONTAIN MERCURY

Manage in accordance with local disposal laws. DO NOT place lamps in trash. Dispose as a hazardous waste. For information regarding safe handling, recycling and disposal, consult www.lamprecycle.org

CETTE LAMPE DANS CE PRODUIT CONTIENT DU MERCURE

Éliminez ou recyclez conformément aux lois applicables. Pour de l'information concernant des pratiques de manipulation sécuritaires et l'élimination sécuritaire et le recyclage, veuillez consulter www.lamprecycle.org

CHAPTER 7

ACCESSORIZING YOUR ENCLOSURE

There are several ways to accessorize the enclosure for your individual requirements. These include the addition of accessory work surfaces, storage cabinets, base stands and mobile stands.

1. Work Surfaces



An optional dished work surface is available.

Dished work surfaces are contoured to fit the enclosure to contain spills. Epoxy is chemical resistant.

Catalog #	Description	Dimensions (W x D x H)
3908402	Black, 4-foot wide	48" x 26.66" x 1"
3908405	Gray, 4-foot wide	48" x 26.66" x 1"

2. Storage Cabinets

Size/Description	SOLVENT			ACID		
	Dual Doors	Right Hinge	Left Hinge	Dual Doors	Right Hinge	Left Hinge
48"	9902000	-	-	9901000	-	-
36"	9902100	-	-	9901100	-	-
30"	9902200	-	-	9901200	-	-
24"	-	9902300	9902400	-	9901300	9901500
18"	-	-	-	-	9901400	9901600
12"	-	-	-	-	-	-
48" w/Self Closing Doors	9903000	-	-	-	-	-
36" w/Self Closing Doors	9903100	-	-	-	-	-
30" w/Self Closing Doors	9903200	-	-	-	-	-
24" w/Self Closing Doors	-	9903300	9903400	-	-	-
24" ADA	-	9906000	9906100	-	9905000	9905200
24" ADA w/Self Closing Doors	-	9906200	9906300	-	-	-
18" ADA	-	-	-	-	9905100	9905300
12" ADA	-	-	-	-	-	-

Size/Description	STANDARD BASE			VACUUM PUMP		
	Dual Doors	Right Hinge	Left Hinge	Dual Doors	Right Hinge	Left Hinge
48"	9900000	-	-	-	-	-
36"	9900100	-	-	-	-	-
30"	9900200	-	-	-	-	-
24"	-	9900300	9900600	-	-	-
18"	-	9900400	9900700	-	9907000	9907100
12"	-	9900500	9900800	-	-	-
48" w/Self Closing Doors	-	-	-	-	-	-
36" w/Self Closing Doors	-	-	-	-	-	-
30" w/Self Closing Doors	-	-	-	-	-	-
24" w/Self Closing Doors	-	-	-	-	-	-
24" ADA	-	9904000	9904300	-	-	-
24" ADA w/Self Closing Doors	-	-	-	-	-	-
18" ADA	-	9904100	9904400	-	-	-
12" ADA	-	9904200	9904500	-	-	-

3. Base Stands and Mobile Stands

Catalog #	Description	Dimensions
3746702	4' Telescoping Base Stand with Fixed Feet	48" w x 29.25" d x 27.5" to 33.5" h
3746712	4' Telescoping Base Stand with 5" Casters	48" w x 29.25" d x 27.5" to 33.5" h

CHAPTER 8

TROUBLESHOOTING

Refer to the following table if your enclosure fails to operate properly. If the suggested corrective actions do not solve your problem, contact Labconco for additional assistance.

PROBLEM	CAUSE	CORRECTIVE ACTION
Lights do not work.	Circuit breaker(s) tripped.	Reset or replace circuit breaker.
	Lamp not installed properly.	Inspect lamp installation.
	Lamp Wiring disconnected.	Inspect lamp wiring.
	Defective lamp.	Replace lamp.
	Light switch is defective.	Replace light switch.
	UV closure panel not installed .	Install UV closure panel (UV lights only).
	Magnetic switch for UV closure panel defective.	Replace switch (UV lights only).
	UV timer circuit board defective.	Replace circuit board (UV lights only).
UV light timer does not work. (PCR only)	No power.	Power cable to UV light timer circuit board is disconnected.
	No lights on.	Verify connection.
	No display.	Replace circuit board for UV light timer if it malfunctions.

APPENDIX A

REPLACEMENT PARTS

The following illustrations indicate the replacement parts.

Appendix A: Replacement Parts

Item	Qty.	Part Number	Description
1	1	3906500	Glass, Side Short
2	1	3906102	Glass, Sash 4' Short
3	1	3905602	Lower Foil 4'
4	2.3 Ft.	6913700	Wiper, Sash
5A	1	1927403	Spring, Compression Sash Latch
5B	1	3906700	Latch Bracket
5C	1	6916500	Latch Sash
5D	2	1893206	Screw, #8-32 x .38 Phil, SS, Type F
6	1	3945200	Sash Assembly 4'
7A	1	3907400	Bracket, Air Foil Right
7B	1	3907401	Bracket, Air Foil Left
7C	2	1932401	Washer, Shoulder Plastic
7D	2	1912108	Washer, .194 ID x .38 OD x .03 thick plastic
7E	2	1909217	Cap Nut #10-24 SS
8	1	3905302	Header 4'
9A	1	1934601	Bushing, Heyco with Flex Shutter 1.50 dia.
9B	1	1936800	Bushing, Heyco Closed 1.50 dia.
10A	2	7868402	Spacer Bushing
10B	2	1912108	Washer, .194 ID x .38 OD x .03 T. Plastic
10C	2	1889316	Screw, #10-24 x 1.00 PH. (SS)
11A	1	3929400	Label, Tissue Culture Enclosure
11B	1	3929500	Label, PCR Enclosure
12	1	3945300	Timer, Digital UV PCB
13A	1	1307000	Switch, 2 position Aux. Outlet
13B	1	1306300	Switch, 3 position Light
14	1	9721901	Lamp, Fluorescent (FT25T8) 25 Watt
15	1	1271300	Lamp, UV (G30T8) 30 Watt
16	1	1294000	Ballast, Fluorescent
17A	1	1233400	Ballast, UV 115V
17B	1	1233600	Ballast, UV 230V
18A	2	1333800	Inlet, Power IEC
18B	1	1334500	Power Cord 115V
18C	1	1334100	Power Cord 230V
19A	1	1333900	Receptacle, Outlet Power
19B	1	1306000	Power Cord, Outlet Power
20A	1	1230700	Receptacle, Interior Switched Outlet, 115V
20B	1	1294400	Receptacle, Interior Switched Outlet, 230V
21A	1	1327201	Circuit Breaker, 10 Amp, 115V
21B	2	1327204	Circuit Breaker, 5 Amp, 230V
22	8	1591606	Rubber Bumper, UV Sash Closure
22A	1	3560510	Panel, UV Closure 2 Ft.
22B	1	3560511	Panel, UV Closure 3 Ft.
22C	1	3560512	Panel, UV Closure 4 Ft.
23	2	1907002	Tape, hook and latch, fastening
24	1	1322800	Switch assembly, magnetic

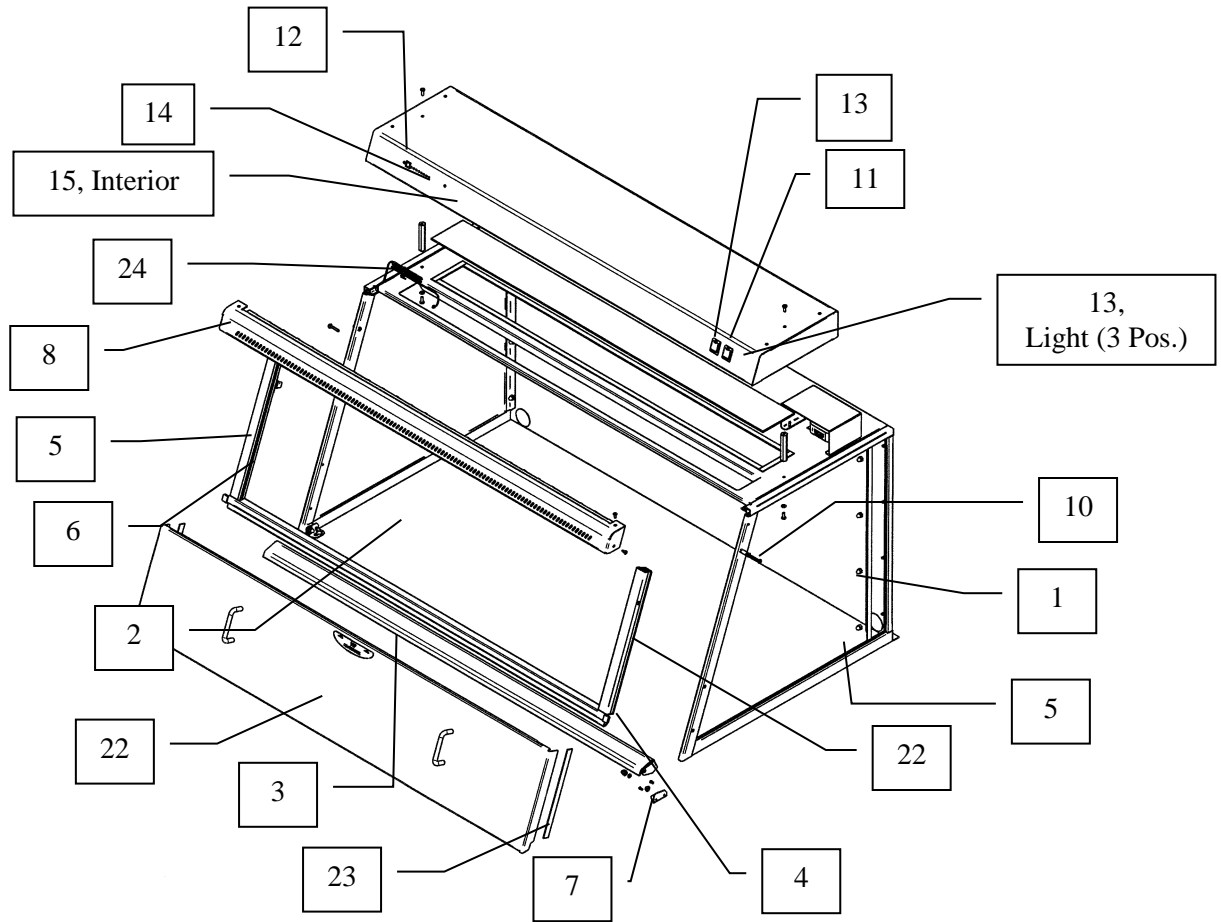


Figure A-1

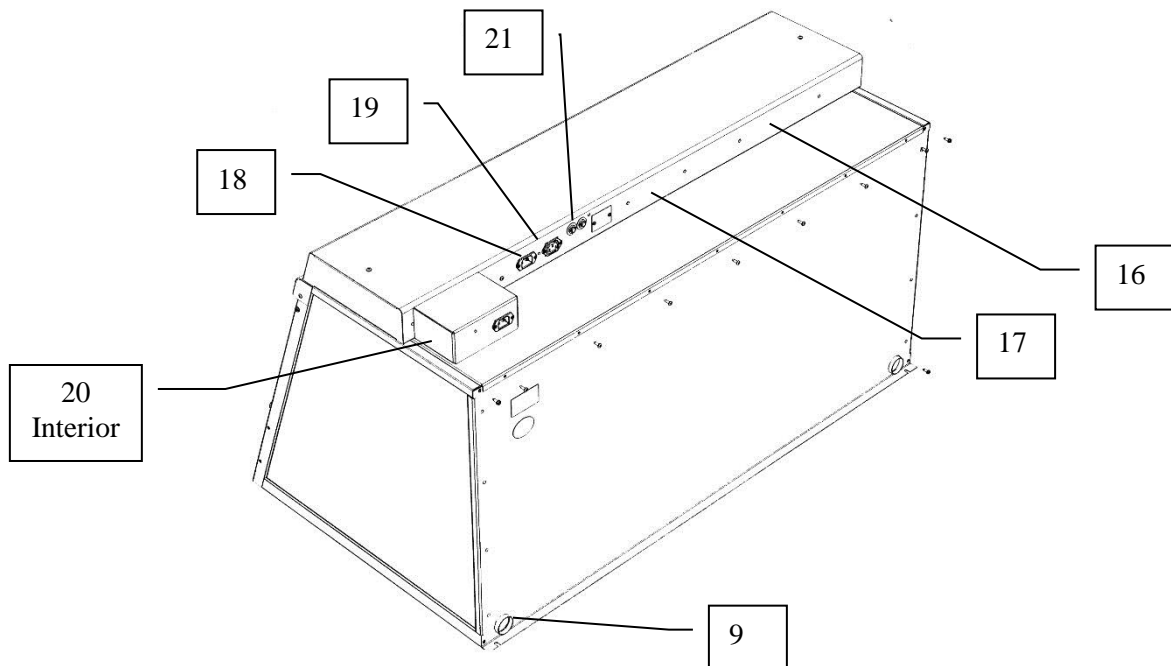
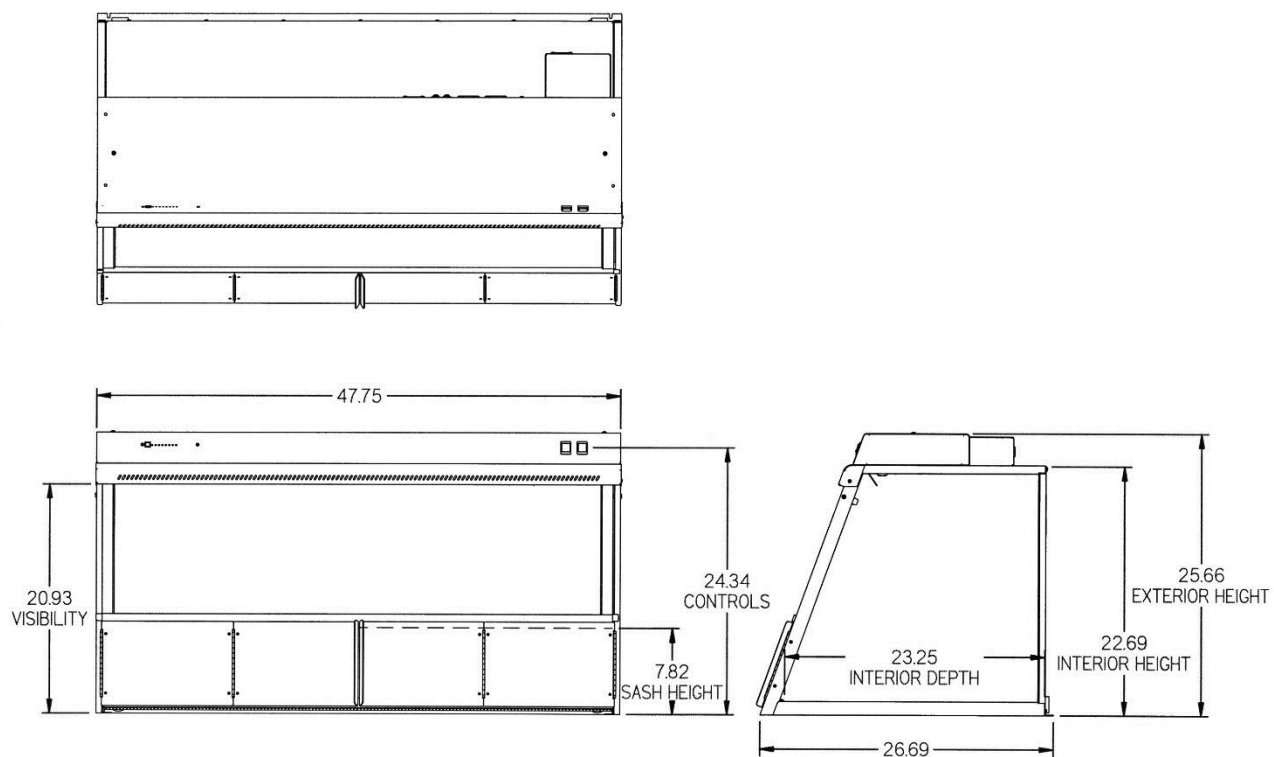


Figure A-2

APPENDIX B

DIMENSIONS

See the following dimensions.



APPENDIX C

SPECIFICATIONS

This Appendix contains technical information about all the Purifier Passive PCR Enclosures and Purifier Tissue Culture Enclosures including electrical specifications and environmental conditions.

Electrical Specifications

- 10 Amps, 115V, 60 Hz
- 5 Amps, 230V, 50/60 Hz
- The auxiliary outlet load is 8 Amps on 115V and 4 Amps on 230V

Environmental Conditions

- Indoor use only.
- Maximum altitude: 6562 feet (2000 meters).
- Ambient temperature range: 41° to 104°F (5° to 40°C).
- Maximum relative humidity: 80% for temperatures up to 88°F (31°C), decreasing linearly to 50% relative humidity at 104°F (40°C).
- Main supply voltage fluctuations not to exceed $\pm 10\%$ of the nominal voltage.
- Transient over-voltages according to Installation Categories II (Over-voltage Categories per IEC 1010). Temporary voltage spikes on the AC input line that may be as high as 1500V for 115V models and 2500V for 230V models are allowed.
- Used in an environment of Pollution degrees 2 (i.e., where normally only non-conductive atmospheres are present). Occasionally, however, a temporary conductivity caused by condensation must be expected, in accordance with IEC 664.