



User's Manual

PuriCare™ Bedding Disposal Stations

Models

3840000

3840020



Labconco's Mascot,
Labby the LABster



*Protecting your
laboratory environment*

LABCONCO®

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Warranty

Labconco provides a warranty on all parts and factory workmanship. The warranty includes areas of defective material and workmanship, provided such defect results from normal and proper use of the equipment.

The warranty for all Labconco products will expire one year from date of installation or two years from date of shipment from Labconco, whichever is sooner, except the following:

- Purifier® Delta® Series Biological Safety Cabinets and PuriCare™ Bedding Disposal Stations carry a three-year warranty from date of installation or four years from date of shipment from Labconco, whichever is sooner.
- Carts carry a lifetime warranty.
- Glassware is not warranted from breakage when dropped or mishandled.

This limited warranty covers parts and labor, but not transportation and insurance charges. In the event of a warranty claim, contact Labconco Corporation or the dealer who sold you the product. If the cause is determined to be a manufacturing fault, the dealer or Labconco Corporation will repair or replace all defective parts to restore the unit to operation. Under no circumstances shall Labconco Corporation be liable for indirect, consequential, or special damages of any kind. This statement may be altered by a specific published amendment. No individual has authorization to alter the provisions of this warranty policy or its amendments. Lamps and filters are not covered by this warranty. Damage due to corrosion or accidental breakage is also not covered.

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.

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CHAPTER 1

INTRODUCTION

Congratulations on your purchase of a Labconco PuriCare Bedding Disposal Station. Your PuriCare product is designed to protect you and your laboratory environment from aerosols. It is the result of Labconco's years of experience manufacturing laboratory equipment, and many of its features were suggested to us by users like you.

The PuriCare offers many unique features to enhance safety, performance and ergonomics. To take full advantage of them, please acquaint yourself with this manual and keep it handy for future reference. If you are unfamiliar with how bedding disposal stations operate, please review *Chapter 4: Theory of Operation and Safety Precautions* before you begin working in the station. Even if you are an experienced user, please review *Chapter 5: Using Your Bedding Disposal Station*; it describes your PuriCare's features so that you can use the station efficiently.

About This Manual

This manual is designed to help you learn how to install, use, and maintain your bedding disposal station.

Chapter 1: Introduction provides a brief overview of the bedding disposal station, 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 your disposal station. Electrical and service requirements are discussed.

Chapter 3: Getting Started contains the information you need to properly unpack, inspect, install, and certify your disposal station.

Chapter 4: Theory Of Operation And Safety Precautions explains how the PuriCare operates and the appropriate precautions you should take when using the station.

Chapter 5: Using Your PuriCare discusses the basic operation of your station. Information on how to prepare, use and shut down your PuriCare are included.

Chapter 6: Maintaining Your PuriCare explains how to perform routine maintenance on your disposal station. Information on how to safely disinfect the interior of your station and replace the lamps are included.

Chapter 7: Troubleshooting contains a table of problems you may encounter while using your disposal station including the probable causes of the problems and suggested corrective actions.

Appendix A: Bedding Disposal Station Components contains labeled diagrams of all of its components.

Appendix B: Bedding Disposal Station Dimensions contains comprehensive diagrams showing all of the dimensions for the PuriCare model.

Appendix C: Bedding Disposal Station Specifications contains the electrical requirements for the Bedding Disposal Station. Wiring diagrams for both the 115V and 230V models are also included.

Appendix D: Quick Chart for the PuriCare Bedding Disposal Station provides useful operating specifications.

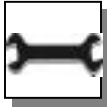
Appendix E: References lists the various resources available that deal with biosafety.

Typographical Conventions

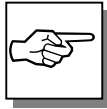
Recognizing the following typographical conventions will help you understand and use this manual:

- 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 biosafety information is presented in boldface type in paragraphs that are preceded by the biosafety icon. Failure to comply with the information following a biosafety icon may result in illness or death.
- 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 your bedding disposal station.





- Critical information is presented in boldface type in paragraphs that are preceded by the wrench icon. These operations should only be performed by a trained certifier or contractor. Failure to comply with the information following a wrench icon may result in injury to the user or permanent damage to your bedding disposal station.



- 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.

Your Next Step

If your PuriCare needs to be installed, proceed to *Chapter 2: Prerequisites* to ensure your installation site meets all of the requirements. Then, go to *Chapter 3: Getting Started* for instructions on how to install your bedding disposal station and make all of the necessary connections.

If you would like to review how the bedding disposal station operates, go to *Chapter 4: Theory Of Operation And Safety Precautions*.

For information on the operational characteristics of your bedding disposal station, go to *Chapter 5: Using Your PuriCare*.

If your bedding disposal station is installed and you need to perform routine maintenance on the station, proceed to *Chapter 6: Maintaining Your PuriCare*.

Refer to *Chapter 7: Troubleshooting* if you are experiencing problems with your PuriCare.

CHAPTER 2

PREREQUISITES

Before you install your Bedding Disposal Station, you need to prepare your site for installation. Carefully examine the location where you intend to install your station. You must be certain that the area is level and of solid construction. In addition, a dedicated source of electrical power must be located near the installation site.

Carefully read this chapter to learn:

- the location requirements for your installation site.
- the electrical power requirements for your installation site.
- the space requirements for your installation site.

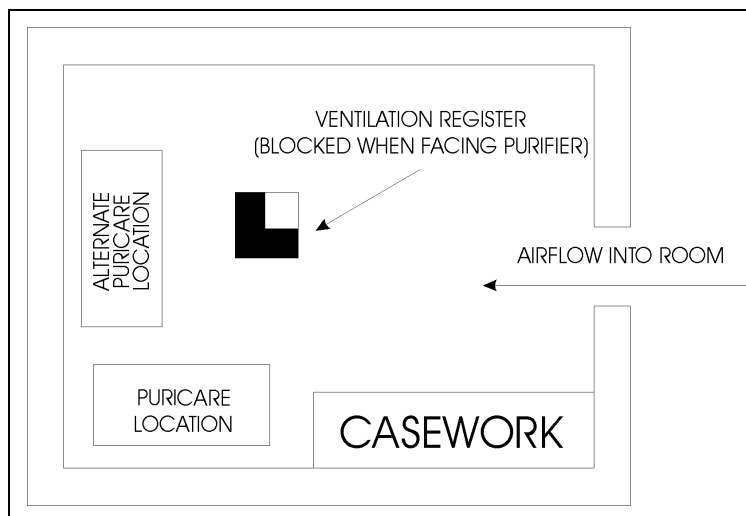
Refer to *Appendix C: Bedding Disposal Station Specifications* for complete station electrical and environmental conditions, specifications and requirements.

Location Requirements



The PuriCare should be located away from traffic patterns, doors, fans, ventilation registers, fume hoods and any other air-handling device that could disrupt its airflow patterns. All windows in the room should be closed. Figure 2-1 shows the optimum location for the PuriCare.

Figure 2-1



Electrical Requirements

The different PuriCare models have the following electrical requirements:

Table 2-1

Model #	Requirements
38400- 00-09	115 VAC, 60 Hz, 5 Amps
38400- 20-29	230 VAC, 50 Hz, 3 Amps

All PuriCare Stations with model numbers ending in –00 to –09 are designed for operation at 115 volts, 60Hz, alternating current. PuriCare Stations with model numbers ending in –20 to –29 are designed for operation at 230 +/- 20 volts, 50 Hz alternating current. A dedicated outlet with a circuit breaker rated at 10 amps should be located as close as possible to the right rear side of the station.



Always follow the plug manufacturer's instructions for the proper assembly and testing of the plug and power cord.

Space Requirements

The dimensions for the different models are shown in *Appendix B: Bedding Disposal Station Dimensions*.

Overhead Clearance

In order for the bedding disposal station to operate properly, there must be at least six inches (150 mm) clearance from any overhead obstructions when the station is in its final operating position.

Your Next Step

After you have determined that the location you have selected accommodates the installation and operational requirements of your station, you are ready to begin installation. Proceed to *Chapter 3: Getting Started*.

CHAPTER 3

GETTING STARTED

Now that the site for your bedding disposal station is properly prepared, you are ready to unpack, inspect, install, and certify it. Read this chapter to learn how to:

- unpack and move your PuriCare.
- set up the station.
- connect the electrical supply source.
- arrange certification.

Depending upon which model you are installing, you may need common plumbing and electrical installation tools in addition to a 3/4" wrench, a flat-blade screwdriver, and a Phillips screwdriver.

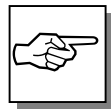


The Bedding Disposal Station weighs approximately 400 lbs. (182 kg). The carton allows for lifting with a mechanical lift truck or floor jack. If you must lift the PuriCare manually, use at least four (4) persons and follow safe-lifting guidelines.

Unpacking Your Bedding Disposal Station

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

Carefully unpack your PuriCare and inspect it for damage that may have occurred in transit. If your unit is damaged, notify the delivery carrier immediately and retain the entire shipment intact for inspection by the carrier.



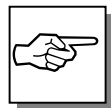
DO NOT RETURN GOODS WITHOUT THE PRIOR AUTHORIZATION OF LABCONCO. UNAUTHORIZED RETURNS WILL NOT BE ACCEPTED.

IF YOUR STATION 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.

Do not discard the carton or packing material for your PuriCare until you have checked all of the components and installed and tested the unit.



Do not remove the PuriCare from its shipping skid until it is ready to be placed into its final location. Move the unit by placing a flat, low dolly under the shipping skid, or by using a floor jack.



DO NOT MOVE THE STATION BY TILTING IT ONTO A HAND TRUCK.

PuriCare Components

Labconco manufactures bedding stations for operation on 115V or 230V.

Locate the station model you received in the following group of tables. Verify that the components listed are present and undamaged.

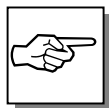
Catalog #	PuriCare Description
3840000	Bedding Disposal Station, 115 VAC
3840020	Bedding Disposal Station, 230 VAC

Plus the Following:

Part #	Component Description
3785900	User's Manual
	Power Cord
	(4) Caster Wheels
	(4) Flat Washers
	(4) Lock Washers
	(4) Hex Nuts

If you did not receive one or more of the components listed for your PuriCare, or if any of the components are damaged, contact Labconco Corporation immediately for further instructions.

Preparing the Station for Operation



ASSEMBLY INSTRUCTIONS FOR THE STATION (LABCONCO P/N 1058500) ARE ATTACHED TO THE FRONT PANEL OF THE PURICARE. IF THESE INSTRUCTIONS ARE MISSING OR UNCLEAR, CONTACT LABCONCO AT 800-821-5525.

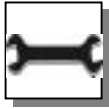
Before Turning on the Unit:

1. Remove the postfilter from its holder on top of the station by pulling it forward, as shown in Figure 3-3.
2. Remove the clear plastic wrapping off of the filter.
3. Reinstall the postfilter, orienting it as shown by the flow arrows on the filter frame. Push the filter back into position until it stops.

Figure 3-3



Measuring the Inflow Velocity



Inflow values and measurement procedures for the PuriCare are described fully in *Chapter 6: Maintaining Your PuriCare*.

Initial Certification

Prior to use, all PuriCare stations should be certified by a qualified certifier. Under normal operating conditions, the PuriCare stations should be recertified at least annually, and when serviced. The certifier should perform the following tests:

- HEPA Filter Leak Test
- Inflow Velocity Test
- Airflow Smoke Patterns

If you have any questions regarding certification agencies or need assistance in locating one, contact Labconco's Product Service Department at 1-800-522-7658 or 816-333-8811.

Your Next Step

After your PuriCare has been installed and certified, you are ready to proceed to *Chapter 4: Theory Of Operation And Safety Precautions*.

CHAPTER 4

THEORY OF

OPERATION AND

SAFETY

PRECAUTIONS

The Bedding Disposal Station operates using the following principles:

- Filtration and retention of particulates by High Efficiency Particulate Air (HEPA) filter
- Directional airflow

The major components in the Bedding Disposal Station are:

- The prefilter
- The HEPA filter
- The activated carbon/alumina postfilter
- The impellers to force air through the unit
- A speed control for the motor
- Station air intakes (baffles) and ductwork

Prefilter

The prefilter is located just below the HEPA filter. Its purpose is to lengthen the operating life of the HEPA filter by removing large particles before they can block it.



REGULARLY SCHEDULED INSPECTION AND REPLACEMENT OF THE PREFILTER IS KEY TO MAINTAINING PROPER OPERATION OF THE ENCLOSURE.

HEPA Filter

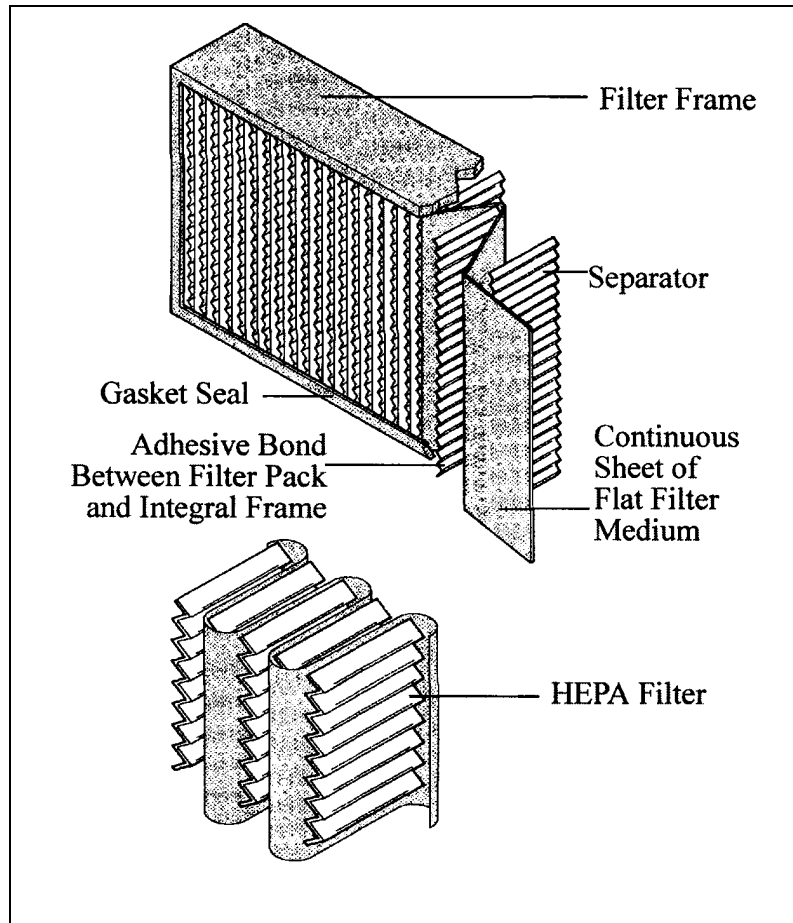
HEPA filters are disposable, dry-type particulate filters. The filter material or media is typically made of borosilicate microfibers that are made into a thin sheet, in a process similar to the production of paper. This sheet is folded, or pleated to increase its surface area. The pleats are held in place by aluminum diffusers or by beads of glue that add rigidity to the media pack. The media pack is then set into a suitable frame, and the perimeter sealed to the filter frame, as shown in Figure 4-1.



The HEPA filter media is very fragile. Do not touch or contact the media surface. If you think the surface of a HEPA filter is damaged, DO NOT USE THE STATION. Have the HEPA filter integrity tested by a qualified certifier before using the station.

HEPA Filters are only effective against particulate material. Gases will pass through the filter.

Figure 4-1



The Activated Carbon/Alumina Postfilter

The postfilter in your Bedding Disposal Station is unique. Inside of its polyester media are granular activated carbon for the adsorption of odors, plus activated alumina impregnated with potassium permanganate, for additional removal of odors and light gases.

Directional Airflow

Directional airflow also plays a key role in the Bedding Disposal Station's performance. Air is drawn into the front of the station and odors. This "curtain" of air makes it difficult for aerosols and odors to escape out of the work area and into the outside environment. This airflow is often calculated and referred to as the **Average Inflow Velocity**. This is shown graphically in Figure 4-2.

Figure 4-2



Impellers

The impellers pull air into the front of the station, through the pre- and HEPA filters, and then discharge it through the postfilter.

Speed Control



The speed control should only be adjusted by a qualified certifier.

The speed control is an electronic circuit that allows the certifier to set the impellers' speed by adjusting its voltage. The PuriCare speed control is rated for 10 Amps current, far in excess of the impellers' normal current draw, to allow for greater reliability.

Airfoil, Baffle and Ductwork

The station's containment and performance are affected by the location, size, and pattern of the airfoils at the front, and the baffle at the rear of the work area.



Never block or obstruct the airfoils or baffle of the PuriCare.

The internal ductwork of the PuriCare conveys the air from the work area to the pre- and HEPA filters, then to the blower, and then to the postfilter.

Safety Precautions



The PuriCare Bedding Disposal Station is **NOT** a biosafety cabinet. Do not use this device for the containment of biohazardous, toxic, flammable, or explosive materials. If you have questions regarding the operation of this device, contact Labconco at 800-821-5525 or www.labconco.com.



The PuriCare Bedding Disposal Station should be certified by a qualified certification technician before its initial use. The station should be recertified whenever it is relocated, serviced or at least annually thereafter.

Some components of the PuriCare Bedding Disposal Station should only be serviced by a qualified certification technician. Some internal components of the PuriCare may become contaminated during operation of the unit. Only experienced personnel competent in the decontamination procedure should decontaminate the station before servicing contaminated components. If you have any questions regarding certification agencies, or need assistance in locating one, contact Labconco's Product Service Department at 800-522-7658 or 816-333-8811.



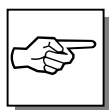
Ensure that the unit is connected to electrical service in accordance with local and national electrical codes. Failure to do so may create a fire or electrical hazard. Do not remove or service any electrical components

without first disconnecting the PuriCare from electrical service.

Avoid the use of flammable gases or solvents in the PuriCare. Care must be taken to ensure against the concentration of flammable or explosive gases or vapors. An open flame should NOT be used in the PuriCare. Open flames may disrupt the airflow patterns in the station or damage the filters' adhesive. Gases under high pressure should not be used in the PuriCare station, as they may disrupt the airflow patterns of the station.



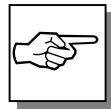
The surface of the HEPA filters are fragile and should not be touched. Care must be taken to avoid puncturing the HEPA filter during installation or normal operation. If you suspect that a HEPA filter has been damaged, DO NOT use the station; contact a local certification agency or Labconco at 800-522-7658 or 816-333-8811 for recertification information.



THE HEPA FILTER IN THE PURICARE STATION WILL GRADUALLY ACCUMULATE AIRBORNE PARTICULATE MATTER FROM THE ROOM AND FROM WORK PERFORMED IN THE STATION. THE RATE OF ACCUMULATION WILL DEPEND UPON THE CLEANLINESS OF THE ROOM AIR, THE AMOUNT OF TIME THE STATION IS OPERATING AND THE NATURE OF WORK BEING DONE IN THE STATION.



Proper operation of the station depends largely upon its location and the operator's work habits. Consult the *Installation* and *Normal Operation* sections of this manual for further details.



WHEN SURFACE DISINFECTING THE PURICARE STATION:

- AVOID SPLASHING THE DISINFECTING SOLUTION ON SKIN OR CLOTHING.
- ENSURE ADEQUATE VENTILATION.
- CAREFULLY FOLLOW THE MANUFACTURER'S SAFETY INSTRUCTIONS WHEN HANDLING DISINFECTANTS AND ALWAYS DISPOSE OF DISINFECTING SOLUTIONS IN ACCORDANCE WITH LOCAL AND NATIONAL LAWS.

DO NOT ALLOW DISINFECTANTS WITH FREE CHLORINE TO CONTACT THE STAINLESS STEEL COMPONENTS OF THE PURICARE FOR A LONG PERIOD OF TIME. FREE CHLORINE WILL CORRODE STAINLESS STEEL AFTER EXTENDED CONTACT.

Your Next Step

After you understand the theory of operation and safety precautions, you are ready to proceed to *Chapter 5: Using Your PuriCare*.

CHAPTER 5

USING YOUR

PURICARE

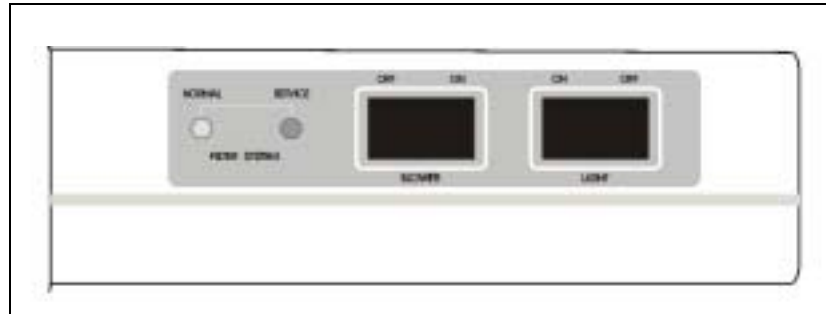
Starting the Station

To start the PuriCare, turn the blower switch to the “ON” position, as shown in Figure 5-1.

Reading the Filter System Indicator

The two light system located on the control panel as shown in Figure 5-1 indicates the total system pressure. During operation, a green “NORMAL” indicator light stays on. When the pre- or HEPA filters become excessively loaded, the “NORMAL” light turns off and the “SERVICE” light turns on, indicating the unit should be serviced. If the “SERVICE” light stays on after replacing the prefilter, a qualified certifier can then determine if the HEPA filter needs to be replaced.

Figure 5-1



Working In Your PuriCare

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 station is in use.

Start-up

- Turn on fluorescent light and station blower.
- Check the airfoil and baffle for obstructions, and note the indicator lights.
- Allow the station to operate unobstructed for 5 minutes.
- Wash hands and arms thoroughly with germicidal soap.
- Wear a long sleeved lab coat with knit cuffs and over-the-cuff rubber gloves. Use protective eyewear. Wear a protective mask.

Wipe-Down

- Wipe down the interior surfaces of the station with 70% ethanol, or a suitable cleaner, and allow to dry.

Bedding Disposal Operations

- Do not obstruct the front airfoils or rear baffle.
- Large objects should not be placed close together.
- Keep all materials at least 4 inches inside of the airfoil, and perform all operations as far to the rear of the work area as possible.
- Avoid the use of an open flame.
- Avoid using techniques or procedures that disrupt the airflow patterns of the station.

Final Purging

- Upon completion of work, the station should be allowed to operate for two to three minutes undisturbed, to purge airborne contaminants from the work area.

Wipe-Down

- Wipe down the interior surfaces of the station with 70% ethanol, or a suitable cleaner, and allow to dry.
- Inspect and clean the prefilter located under the HEPA filter.
- Dispose of rubber gloves appropriately, and have lab coat laundered properly.
- Wash hands and arms thoroughly with germicidal soap.

Shutdown

- Turn off the fluorescent light and station blower.

Your Next Step

After you understand how to operate and work in the Bedding Disposal Station, you are ready to proceed to *Chapter 6: Maintaining Your PuriCare*.

CHAPTER 6

MAINTAINING YOUR PURICARE

Now that you have an understanding of how to work in the Bedding Disposal Station, we will review the suggested maintenance schedule and the common service operations necessary to maintain your PuriCare for peak performance.



Many of the service operations should be performed only by trained and experienced certification technicians after the station has been properly decontaminated. DO NOT attempt to perform these operations if you are not properly trained. The service operations that require qualified certifiers are preceded by the wrench icon.

Routine Maintenance Schedule

After Each Work Session

- Inspect the prefilter and replace if needed.

Weekly

- Using 70% ethanol, or a suitable disinfectant, surface disinfect the inside of the station, and the work surface.
- Operate the station blower, noting the indicator lights.

Monthly (or more often as required)

- Using a damp cloth, clean the exterior surfaces of the station, particularly the front and top of the unit, to remove any accumulated dust.
- Replace the prefilter if needed.
- All weekly activities.

Annually

- Have the station recertified by a qualified certification technician.
- All monthly activities.

Biannually

- Replace the fluorescent lamp.

Service Operations

Prefilter Removal:

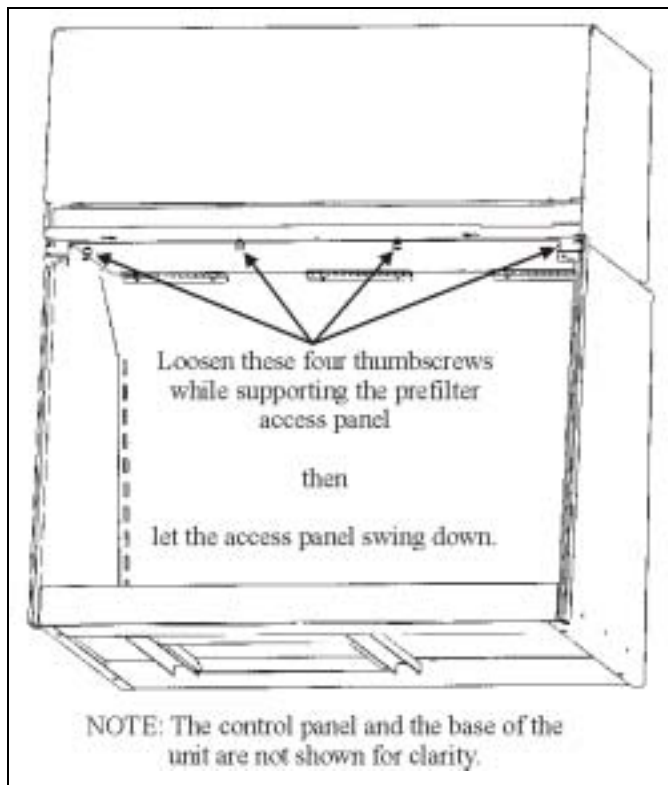


The prefilter may be contaminated with allergenic material. Take appropriate precautions when removing and handling the prefilters to prevent exposure.

Prefilter replacement:

1. Turn the station off.
2. Loosen the four thumbscrews that secure the prefilter access panel to the top of the work area, as shown in Figure 6-1. Let the access panel swing down.
3. Pull the prefilter straight out and down.
4. Install a new prefilter, orienting the prefilter airflow directional arrows up towards the HEPA filter.

Figure 6-1



Postfilter replacement:

1. Remove the postfilter from its holder on top of the station by pulling it forward, as shown in Figure 6-2.
2. Discard the old postfilter.
3. Remove the clear plastic wrapping off of the new postfilter.

4. Install the postfilter, orienting it as shown by the flow arrows on the filter frame. Push the filter back into position until it stops.

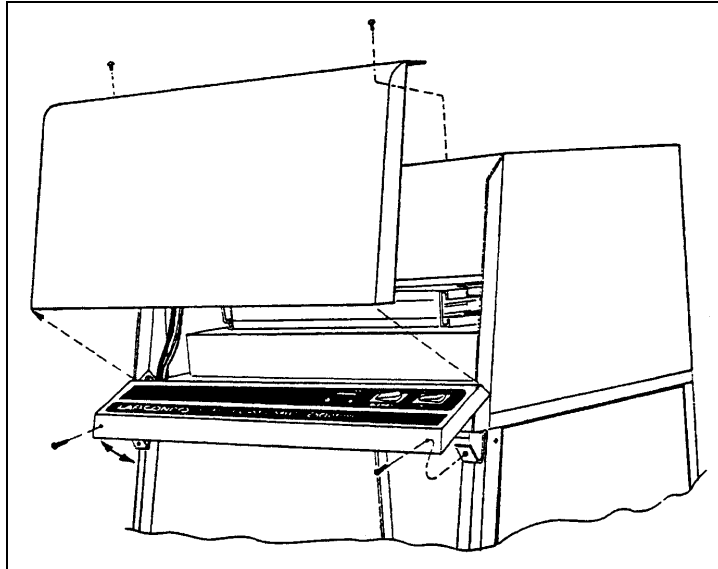
Figure 6-2



Dress Panel Removal:

1. Locate the front dress panel, just above the control panel. Remove the two screws located on the top of the panel. Remove the panel by pulling it slightly upward and out, as shown in Figure 6-3.

Figure 6-3



Fluorescent Lamp Removal:

1. Remove the front dress panel as described above.
2. Locate the control panel on the front of the cabinet, which has the filter indicator lights and switches. Remove the screws located on each lower end of the panel. Swing the panel upward for access to the fluorescent lamp, as shown in Figure 6-3.
3. Remove the fluorescent lamp by rotating the lamp and pulling it straight out of its sockets.
4. Install the new lamp by reversing the removal procedure.

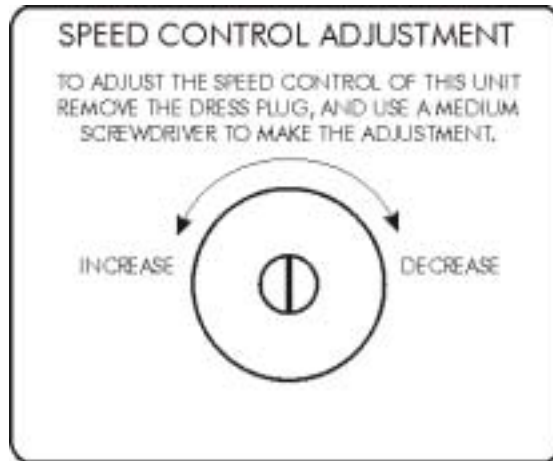
Speed Control Adjustment

The speed control should only be adjusted by a qualified certifier.

1. Remove the front dress panel as described above.
2. Adjust the speed control as required by turning the screw counterclockwise to increase blower speed, or clockwise, to decrease the blower speed, as shown in Figure 6-4.

3. Replace the front dress panel and reestablish the inflow air velocity.

Figure 6-4



Filter Indicator System Adjustment



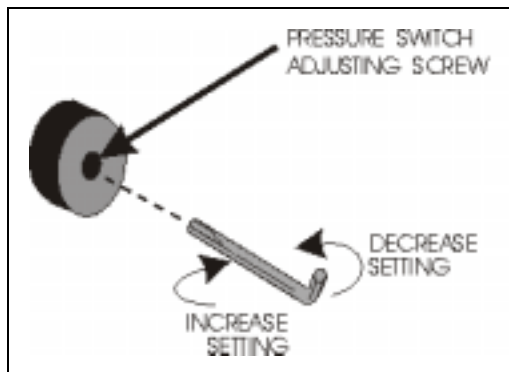
The Filter Indicator System was adjusted at the factory and should not require recalibration until the HEPA filter is replaced.

To adjust system, do the following:

1. Ensure that the prefilter is new and the station is operating within its airflow tolerance.
2. Remove the two screws that secure the front dress panel, as shown in Figure 6-3, and remove the panel.
3. Locate the adjustment screw access plug, on the left side of the enclosure frame, above the HEPA filter. Remove the plug. Replace the dress panel.
4. Using cardboard, or a similar material, block off approximately $\frac{1}{2}$ of the postfilter. This will simulate an increased load on the system.

5. If the 'NORMAL' light is on, remove the dress panel, and using the appropriate hex wrench, turn the adjustment switch slowly clockwise as shown in Figure 6-5. Reinstall the dress panel. Repeat this procedure until the 'SERVICE' light turns on when the dress panel is replaced.
6. If the 'SERVICE' light is on, remove the dress panel, and using the appropriate hex wrench, turn the adjustment switch slowly counterclockwise as shown in Figure 6-5. Reinstall the dress panel. Repeat this procedure until the 'NORMAL' light turns on when the dress panel is replaced.
7. To confirm correct operation, turn the unit off, uncover the postfilter and restart the station. The 'NORMAL' light will be on. When the postfilter is slowly covered over, the 'SERVICE' light will illuminate.

Figure 6-5



HEPA Filter Replacement



The HEPA filter should be serviced only by a qualified certifier. After the HEPA filter is replaced, the unit MUST be certified.

1. Unplug the cabinet.
2. Remove the front dress panel as described in *Customer Service Operations* section of this manual.

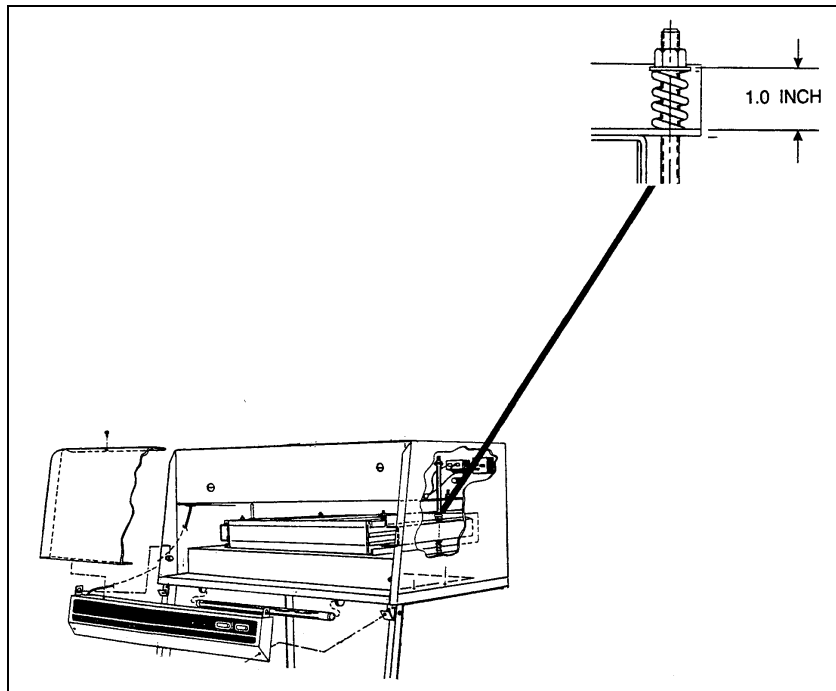
3. Remove the two access hole plugs on the top of the unit.
4. Using the 9/16" deep socket, loosen the filter clamp nuts located in the access holes. Refer to Figure 6-6 for further details.
5. With the clamp bolts loosened, the supply filter-clamping frame should be clear of filter. Carefully pull the filter straight out of the unit and discard properly.
6. With the filter removed, inspect the clamping frame and the frame of the cabinet for damage.
7. Cover the surface of the new HEPA filter gasket with a light coating of silicone grease, if desired.
8. Install the new HEPA filter by pushing it straight into the cabinet, ensuring that it is correctly oriented and the filter fits properly in the cabinet.



The filter clamp nuts should only be tightened enough to ensure a proper seal at maximum tightness, the height of the filter spring should equal 1" (25mm). NEVER tighten the clamp nut beyond this setting. See Figure 6-6.

9. Tighten the clamp nuts uniformly until the filter gasket is properly compressed against the cabinet frame. Inspect the seal thoroughly before proceeding.
10. Reinstall the front dress panel and the access hole plugs on the top of the unit.
11. Plug the cabinet in and have it recertified before use.

Figure 6-6



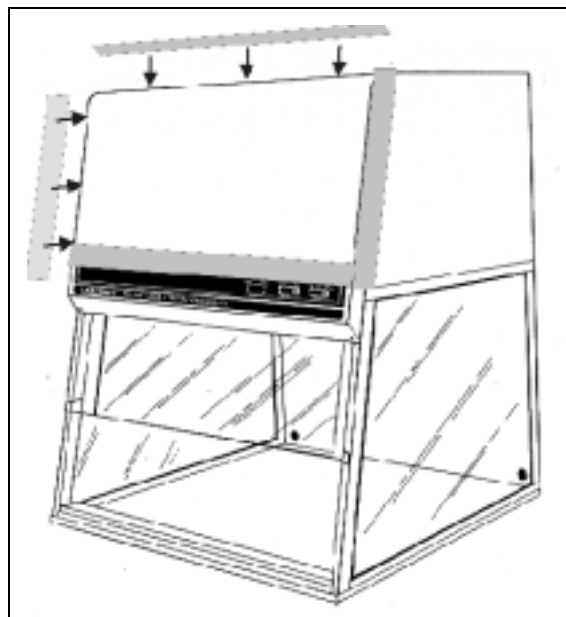
HEPA Filter Leak Test Procedure

To ensure dirty room air does not affect the HEPA Filter Leak Test and that the control panel and sash gaskets are sealing, take the following steps:

1. Turn on the enclosure and set the average inflow velocity as indicated in inflow velocity test procedure. Remove the postfilter
2. Tape closed all openings full length across top, front and sides of the front dress panel as shown in Figure 6-7.
3. Turn the photometer on and calibrate it per the manufacturer's instructions. The upstream concentration of DOP will be approximately 24 ug/l. Use these values to establish the upstream value of 100%.

4. Place photometer pickup over the exhaust discharge and sample the concentration. The concentration must not exceed 0.005%.
5. If the unit fails, check the gasket between the control panel and the upper cabinet flange. Also, check gasket attached to underside of the upper cabinet for contact with the upper edge of the sash when it is in the closed position.
6. Use a Laskin nozzle-type generator. DO NOT use more than one nozzle. Operate the generator at 10 PSIG. The calculations listed above are based on the use of Di-octyl-Pthalate as an aerosol challenge. You may need to correct the valves listed if you use an alternate fluid.
7. Place the generator discharge near the work access opening of the enclosure.
8. Start the generator. Ensure that only one nozzle is operating at 10 PSIG.
9. To establish the downstream concentration of aerosol, place the photometer pick up over the exhaust discharge, and sample the concentration at several locations.
10. The average concentration at each of the points must not exceed 0.005% of the upstream concentration.

Figure 6-7

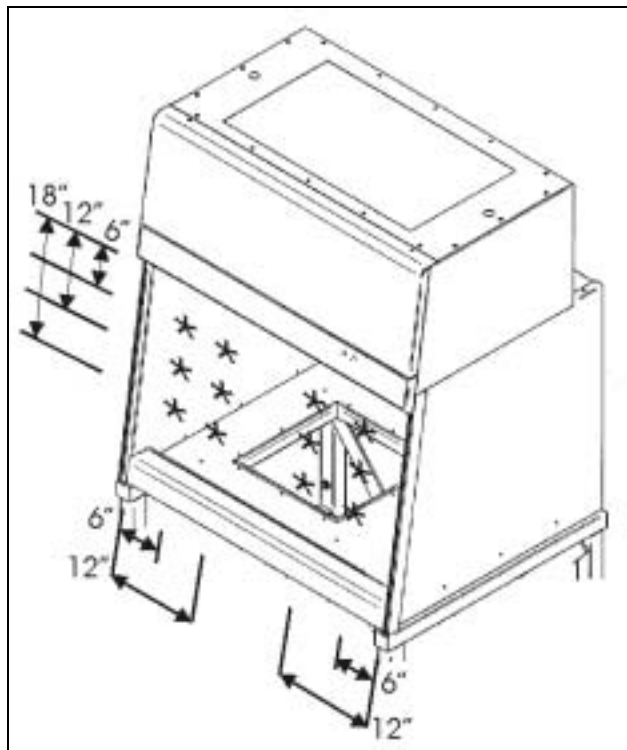


Inflow Velocity Test Procedure

Inflow velocity can be determined by use of a thermal anemometer at the face of the work access opening by taking the following steps:

1. If the meter has an adjustable time constant, set it at 10 to 15 seconds.
2. Take three rows of readings at 6, 12 and 18 inches from the top of the opening at positions that are 6 and then 12 inches in from both side walls. This will yield a grid of 12 sampling points. See Figure 6-8 for probe placement.
3. Add the 12 readings together and divide by three to obtain the average inflow velocity.
4. The factory inflow velocity setting is $55 \text{ FPM} \pm 5 \text{ FPM}$. The blower speed can be adjusted by turning the speed control located behind the front dress panel.

Figure 6-8



Airflow Smoke Patterns

Non-thermal smoke should be released from one side of the enclosure to the other, along a line in the middle of the work area, two inches above the work surface. The smoke should flow directly into the rear baffle. Smoke released near the front end of the enclosure, or at the top of the enclosure may exhibit vortexing and a reflux along the sidewalls or top of the enclosure. This turbulence is normal and does not negatively impact containment of aerosols above the disposal hole.

Motorized Impeller Replacement

The motorized impeller should be replaced by a qualified certifier. The motorized impeller is a non-serviceable component and must be replaced as a unit. When the motorized impeller is replaced, its capacitor should be replaced with a new one. Following replacement of the motorized impeller, the cabinet **MUST** be recertified by a qualified certifier.

1. Unplug the enclosure. Remove the postfilter. Remove the top panel by removing all of the fasteners on the top as described in the *Customer Service Operations* section of this manual.
2. Disconnect the motor ground wire from the frame. Disconnect the wires connecting the motorized impeller to the wiring harness.
3. Using a small wrench, remove the four lock nuts that secure the motor brace to the blower shelf. Remove the brace and motorized impeller as an assembly. Placing the assembly on a flat surface, remove the four screws that secure the motorized impeller to the brace. Disconnect the two wires from the motor to its capacitor, located on the side of the brace. Remove the motorized impeller from the brace.

4. Replace the capacitor with a new one of equal voltage and capacity.
5. Reassemble the unit by reversing the disassembly steps. Recertify the enclosure.

Storage

If the Bedding Disposal Station is to be left unused for more than one month, the unit should be prepared for storage.

1. Surface disinfect or contaminate the cabinet as required.
2. Unplug the unit.
3. Cover and seal the work area access opening and the exhaust outlet with plastic sheeting.
4. Ensure that the cabinet will not be moved or disturbed while in storage.

The cabinet should not be stored in excessive humidity or temperature extremes. If the cabinet is moved during storage it must be recertified before use.

CHAPTER 7

TROUBLESHOOTING

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

PROBLEM	CAUSE	CORRECTIVE ACTION
Station impellers and lights won't turn on	Unit not plugged into outlet	Plug the PuriCare into appropriate electrical service.
	Circuit breakers tripped	Reset circuit breakers.
Motorized impellers won't turn on but lights work	Impeller wiring is disconnected	Inspect impeller wiring
	Impeller switch is defective	Replace impeller switch
	Motorized impeller is defective	Replace motorized impeller
	Capacitor is defective	Replace capacitor
Cabinet impeller turns on but lights don't work	Lamp not installed correctly	Inspect lamp installation.
	Lamp wiring is disconnected	Inspect lamp wiring

PROBLEM	CAUSE	CORRECTIVE ACTION
Cabinet impeller turns on but lights don't work (cont.)	Lamp is defective	Inspect lamp wiring.
	Lamp switch is defective	Replace lamp switch
	Defective lamp ballast	Replace lamp ballast
Service light is on	Blockage of the exhaust grille	Check the exhaust grille on top of the unit to ensure they are not blocked or restricted
	Prefilter loading	Replace prefilter
	HEPA filter loading	The light will turn on when the filter is loaded

APPENDIX A

BEDDING DISPOSAL

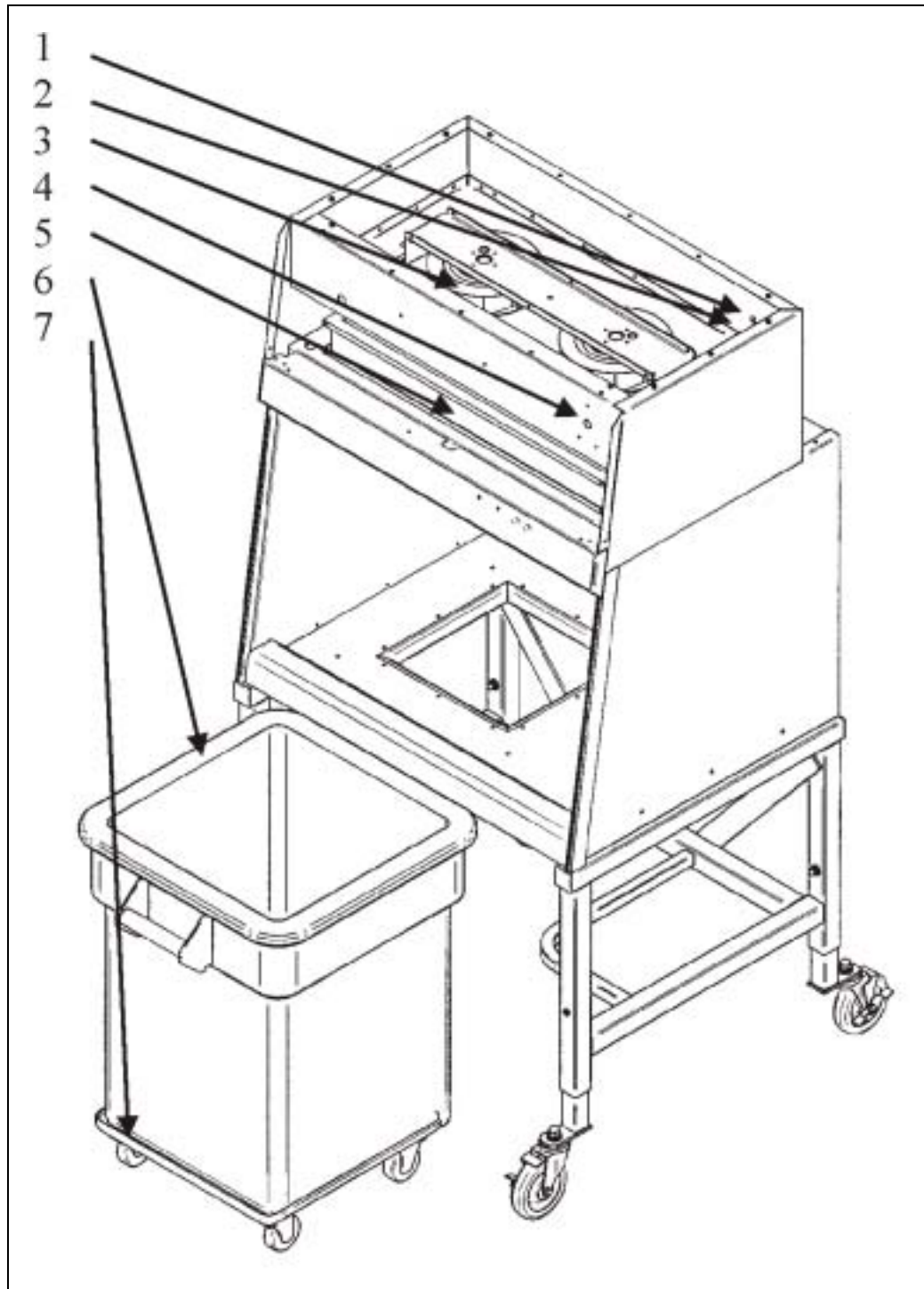
STATION

COMPONENTS

Illustration A-1 indicates the location of the following service parts:

Bedding Disposal Station Replacement Parts

Item	Quantity	Part No.	Description
1	1	1327204	Circuit Breaker, 5 Amp
2	2	1327200	Circuit Breaker, 3 Amp
3	2	3717400	Impeller, 115 VAC
3A	2	3717500	Impeller, 230 VAC
4	1	3704400	Speed Control Assembly, 115 VAC
4A	1	3704401	Speed Control Assembly, 230 VAC
5	1	3707901	HEPA Filter
6	1	3801000	Waste Container
7	1	3801500	Dolly
8	1	1230900	Lamp, 17 watt Fluorescent (F17T8) (not shown)
9	2	1302300	Switch – 2 Position (not shown)
10	1	1304600	Capacitor, 115 VAC (not shown)
10A	1	1304600	Capacitor, 230 VAC (not shown)
11	1	3803200	Prefilter (not shown)
12	1	3796201	Postfilter (not shown)

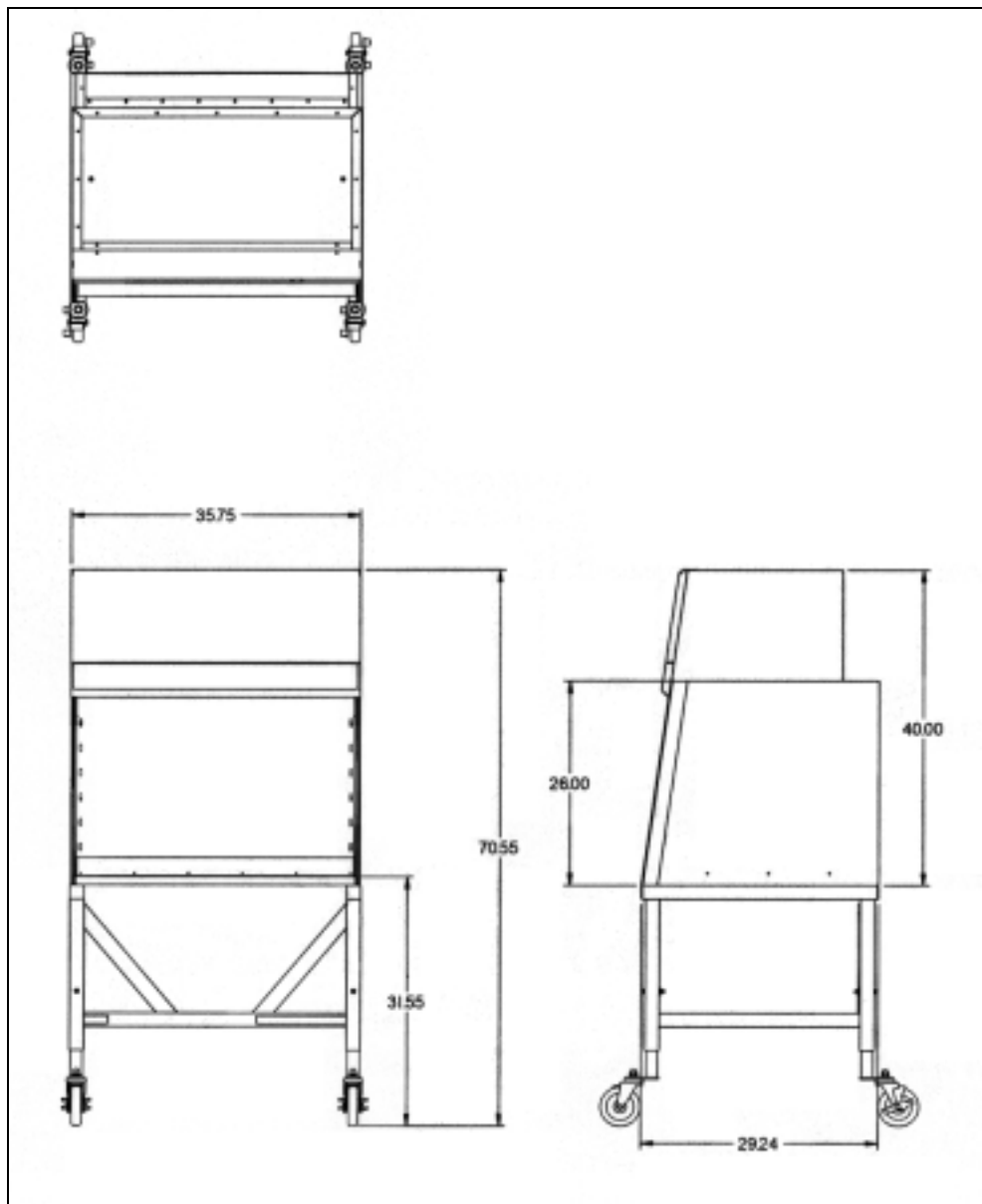


APPENDIX B

BEDDING DISPOSAL

STATION DIMENSIONS

B-1



APPENDIX C

BEDDING DISPOSAL

STATION

SPECIFICATIONS

Electrical Data

Station Model	Electrical Requirements
3840000 to -09	115 VAC – 60 Hz, 1 Phase – 5 Amps

Station Model	Electrical Requirements
3840020 to -29	230 VAC – 50/60 Hz, 1 Phase – 3 Amps

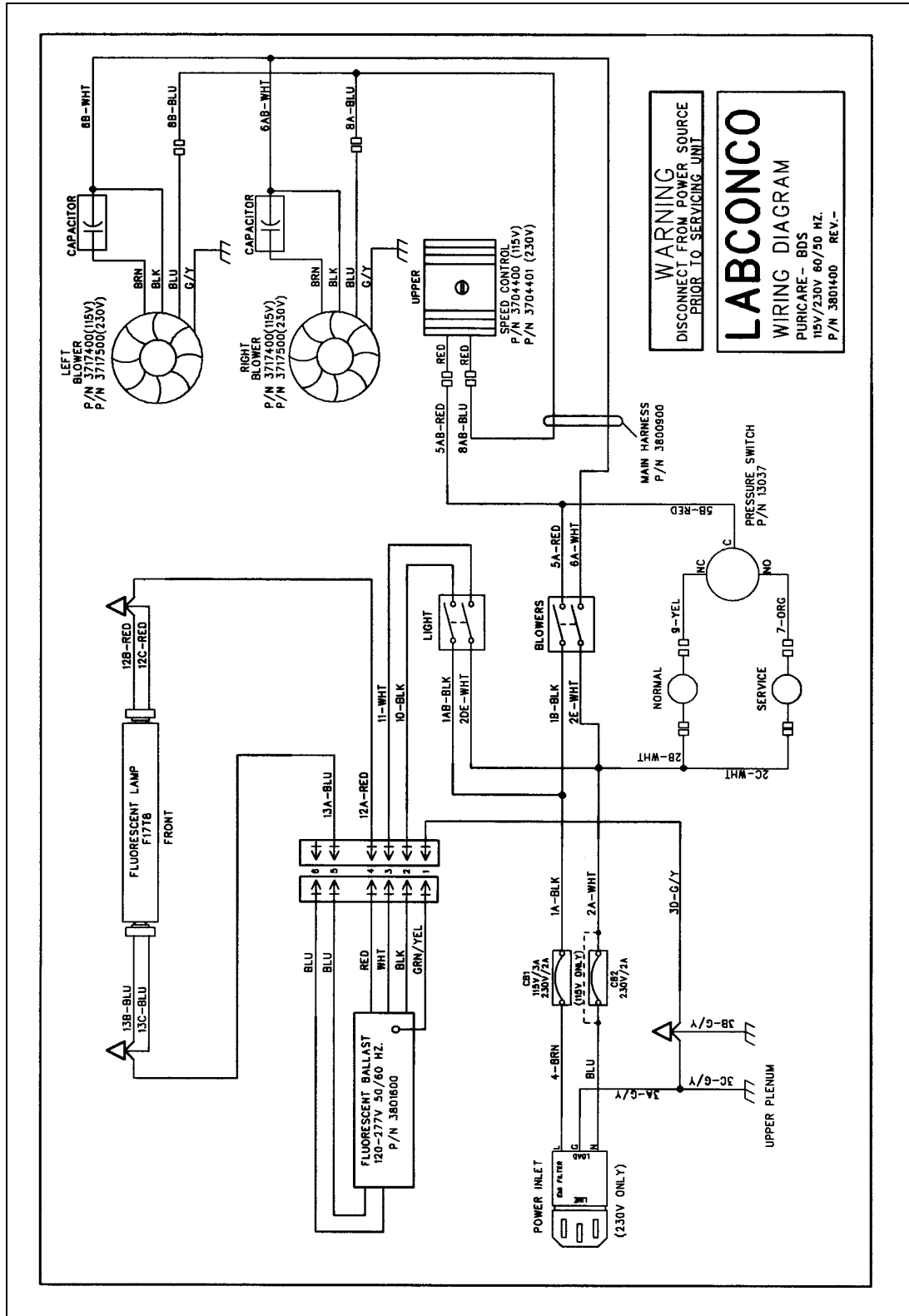
Impeller Specifications (2 each)

Station Model	Electrical Requirements
3840000 to -09	115 VAC – 60 Hz, 100 Watts, 2550 RPM, Automatic Thermal Protection

Station Model	Electrical Requirements
3840020 to -29	230 VAC – 50/60 Hz, 100 Watts, 2550 RPM, Automatic Thermal Protection

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 overvoltages according to Installation Categories II (Overvoltage 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.



APPENDIX D

QUICK CHART FOR

THE PURICARE

BEDDING DISPOSAL

STATONS

Model	38400
Opening Height (inches)	23
Inflow (FPM)	50-60
Work Area (ft ²)	5.23
Total Air Volume Displacement (CFM)	262-314
Number of Laskin Nozzles Needed	1
HEPA Filter Dims. (in.)	30x18x3
Fluorescent Light(s)	F17T8

APPENDIX E

REFERENCES

Many excellent reference texts and booklets are currently available. The following is a brief listing:

Primary Containment for Biohazards: Selection, Installation and Use of Biological Safety Stations. September 1995. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention and National Institutes of Health.

Biosafety in Microbiological and Biomedical Laboratories. 4th Edition, May 1999. U.S. Department of Health, Education, and Welfare, National Institutes of Health, Division of Safety, Bethesda, MD 20892.

Biosafety in the Laboratory. 1989. National Research Council, National Academy Press, Washington, D.C.

Laboratory Safety: Principles and Practices. 2nd Edition 1995. American Society for Microbiology, Washington, D.C.

The Foundations of Laboratory Safety. 1990. Stephen R. Rayburn. Springer-Verlag, New York.

Websites of Interest:

www.absa.org
www.cdc.gov
www.labconco.com

DECLARATION OF CONFORMITY

Application Council Directive(s): 73/23/EEC, 89/336/EEC

Standard(s) to which conformity is declared: EN61010, EN55022, EN50082-1

Manufacturer's Name: Labconco Corporation

Manufacturer's Address: 8811 Prospect Avenue
Kansas City, MO 64132 USA

Importer's Name: See Shipping/Customs Documents*

Importer's Address: See Shipping/Customs Documents for your equipment

Type of Equipment: Laboratory Equipment

Model No: PuriCare Bedding Disposal Station
3840020 3-foot wide

Serial No.: Various – See Individual Declaration

Year of Manufacture: 2003 and subsequent

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

See individual Declaration of Conformity which will be signed by the importer for your country.

Place: _____
(Signature)

Date: _____
(Full Name)

(Position)

*An individual version of this declaration is included with your shipping/customs documentation.

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