

**INSTRUCTION MANUAL
BASIC 47 – FUME HOOD
MODELS – 22473, 22474, 22475**



LABCONCO CORPORATION, 8811 PROSPECT, KANSAS CITY, MO. 64132, 816—333-8811

Dear Customer:

This letter is to ensure that you get the best performance from your Labconco product. We want to be sure you are satisfied. If damage has occurred in shipping, the customer must file a claim with the carrier **IMMEDIATELY! DO NOT** return any items to Labconco Corporation without written authorization from the factory. Contact Labconco Corporation directly for assistance on your equipment.

A great deal of care has gone into the engineering, production and ultimate quality control of your Labconco product. That is why we affix this badge to our products. Your satisfaction is of great concern to us.

LABCONCO ®	
A QUALITY PRODUCT FROM LABCONCO	
DEPT. MANAGER	_____
QUALITY CONTROL	_____

	DATE

We know that even the best products require service from time to time. So if this is ever true of your Labconco product, call the Labconco Service Dept. directly at (816) 333-8811, and ask for our service manager for all of the assistance that you need.

We suggest you keep all of this material together. It's nice to know you are protected, even though you may never need it.

WARNING: THE DISPOSAL OF SUBSTANCES USED IN CONNECTION WITH THIS EQUIPMENT MAY BE GOVERNED BY VARIOUS FEDERAL, STATE OR LOCAL REGULATION. ALL USERS OF THIS EQUIPMENT ARE URGED TO BECOME FAMILIAR WITH ANY REGULATIONS THAT APPLY IN THE USERS AREA CONCERNING THE DUMPING OF WASTE MATERIALS IN OR UPON WATER, LAND OR AIR AND TO COMPLY WITH SUCH REGULATIONS.

Sincerely,

LABCONCO CORPORATION

TABLE OF CONTENTS

Introduction.....	2
General Description.....	2
Hood Performance.....	2
Specifications.....	3
Detailed Function Components — Model 22473 and 22475	4
Detailed Function of Components — Model 22474.....	5
Installation.....	6
Installation Factors.....	6
Sash Weight Installation	7
Exhaust Connection — Remote Blower Hood	7
Exhaust Connection — Integral Blower Hood	7
Replacement of Pillow Block Bearing	8
Replacement of the Exhaust Blower Motor.....	8
Replacement Parts Listing	9
Replacement Parts Diagram.....	10

Product Designs Are Subject To Change Without Notice

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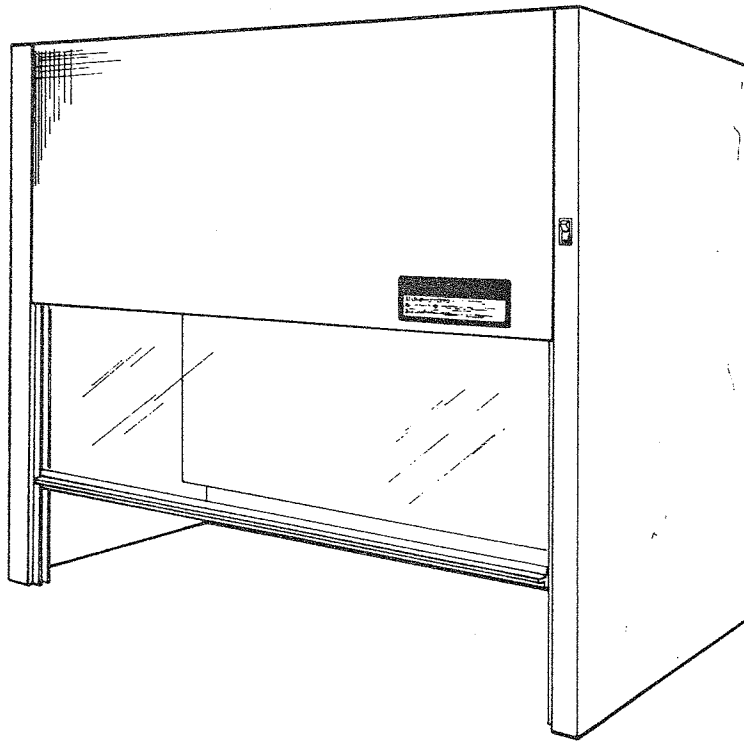
INTRODUCTION

General Description

The Labconco Basic-47 Fume Hood has been engineered and designed for applications requiring only elemental fume hood features.

With its low profile and 22" depth, it will fit on any bench top and accommodates 7-foot ceilings, making it easy and economical to add to an existing facility or use in a mobile situation such as a trailer.

In spite of its simplicity, this basic hood is rugged and reliable. Its epoxy coated steel construction resists corrosion, impact, cracking, peeling, and humidity.



Hood Performance

The Labconco Basic 47 Fume Hood has been engineered to allow you the maximum in work area and personnel safety. It is available in an

integral motor blower or remote blower design, with the integral blower hoods available in explosion-proof or non explosion-proof configurations.

SPECIFICATIONS

22473 Basic-47 Fume Hood with Motor/Blower and Vapor Proof Light.

The dimensions are 47" x 22" x 48" high and for operation on 115 volt 60 Hz AC. The integral exhaust blower utilizes a polypropylene wheel and is equipped with 1/3 hp motor, delivering a minimum of 700 CFM at .25" H₂O external static pressure. The hood exterior and interior are

powder epoxy coated steel. The unit has 100 watt vapor proof light, 3/16 inch thick tempered glass sash, 7 foot 3-wire cord and plug, internal wiring and two switches. The color of the body is beige with a umber brown front panel. Shipping weight, 272 pounds.

22474 Basic-47 Fume Hood Without Motor/Blower.

This model has dimensions of 47" x 22" x 48" high and for operation on 115 volt 60 Hz AC. Static pressure loss through the hood does not exceed .28" H₂O at 700 CFM. The hood interior and exterior are powder epoxy coated steel. The

unit has a 100 watt vapor proof light, 3/16 inch thick tempered glass sash, 7 foot 3-wire cord and plug, internal wiring and switch. The color of the body is beige with an umber brown front panel. Shipping weight, 247 pounds.

22475 Basic-47 Fume Hood with Explosion-Proof Motor/Blower and Light.

Having dimensions of 47" x 22" x 48" high, this model operates on 115 volts, 60 Hz AC. The integral exhaust blower is equipped with 1/3 hp explosion-proof motor and delivers a minimum of 700 CFM at .25" H₂O external static pressure. The hood interior and exterior are powder epoxy

coated steel. The unit has 100 watt explosion-proof light and 3/16" thick tempered glass sash. The hood is furnished without switches and wiring as these must conform to varying local codes. The color of the body is beige with an umber brown front panel. Shipping weight, 272 pounds.

Model 22473 and 22475

Detailed Function of Components

1. **TAMPER PROOF BAFFLE:** The tamper proof baffle has been shaped to develop a uniform face velocity pattern across the sash opening of the hood. Because the baffle has been set to maintain a uniform face velocity pattern for all material applications, it is not adjustable.

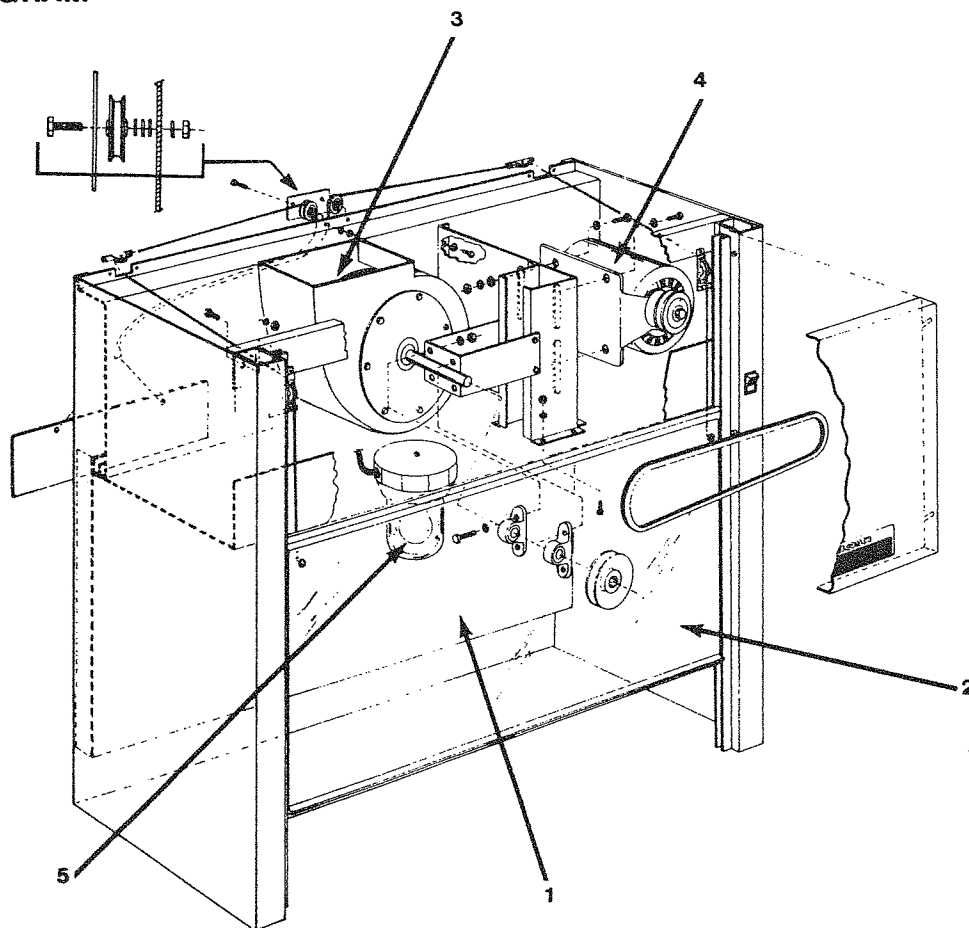
2. **TEMPERED SAFETY GLASS:** A vertical rising, tempered safety glass sash assembly allows the hood user the flexibility of arranging the sash at a position suitable for various procedures.

3. **EXHAUST CONNECTION:** The hood features epoxy coated blower housing exhaust connection sized to allow for a minimum of static pressure loss through the hood structure and still provide a good transport velocity through the exhaust system.

4. **INTEGRAL MOTOR/BLOWER ASSY:** A fractional horsepower motor and polypropylene impeller wheel with belt drive adjustment capabilities allow flexibility for this system and provide the impetus for the fume removal.

5. **LIGHT FIXTURE:** The hood interior is illuminated by vapor proof incandescent light that is located inside of the hood interior on Model 22473. Explosion-proof lighting (incandescent) is also available on Model 22475.

LABELED DIAGRAM



Model 22474

Detailed Function of Components

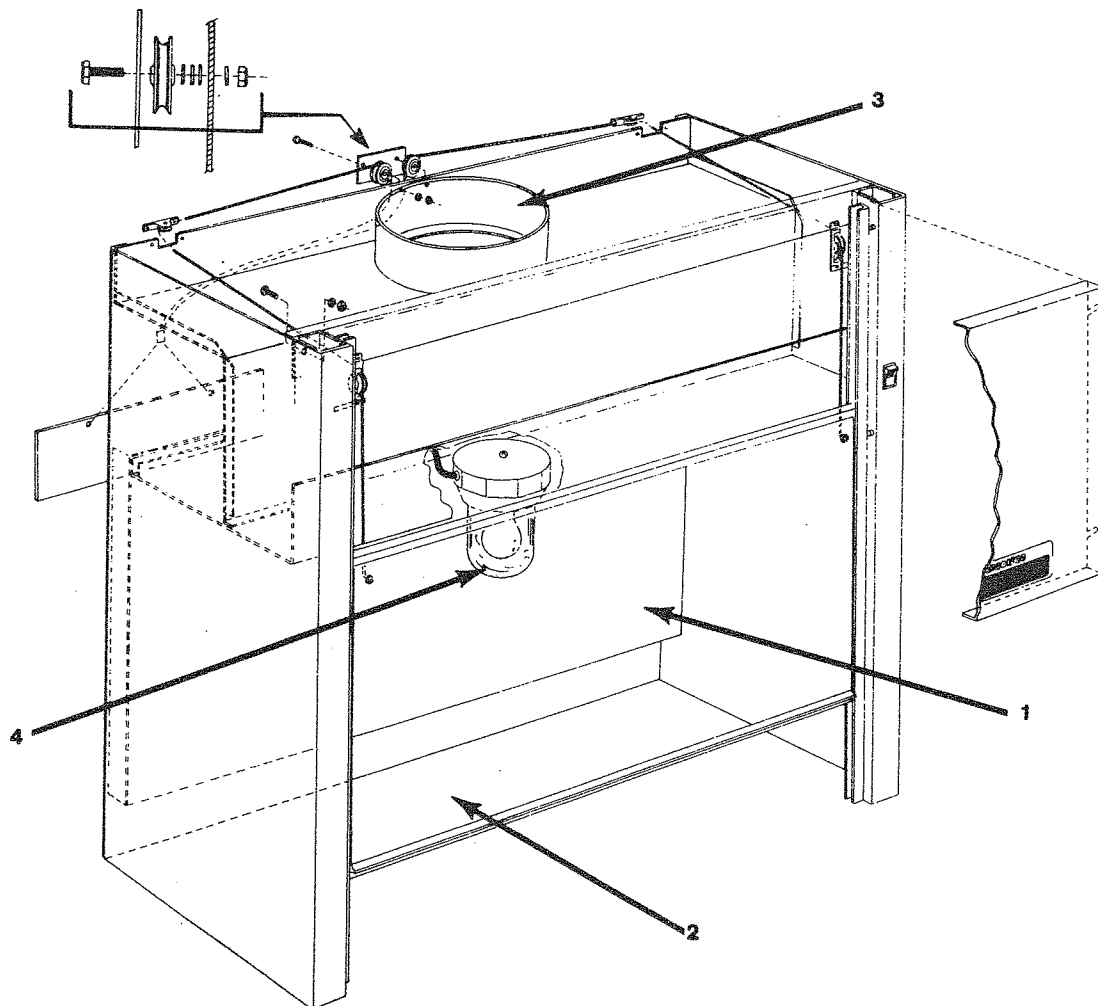
1. **TAMPER PROOF BAFFLE:** The tamper proof baffle has been shaped to develop a uniform face velocity pattern across the sash opening of the hood. Because the baffle has been set to maintain a uniform face velocity pattern for all material applications, it is not adjustable.

2. **TEMPERED SAFETY GLASS:** A vertical rising, tempered safety glass sash assembly allows the hood user the flexibility of arranging the sash at a position suitable for various procedures.

3. **EXHAUST CONNECTION:** The hood features a 10 3/4 ID PVC exhaust connection sized to allow for a minimum of static pressure loss through the hood structure and still provide a good transport velocity through the exhaust system.

4. **LIGHT FIXTURE:** The hood interior is illuminated by vapor proof incandescent light that is located inside of the hood interior. Explosion-proof lighting (incandescent) is also available on specific models of the hood.

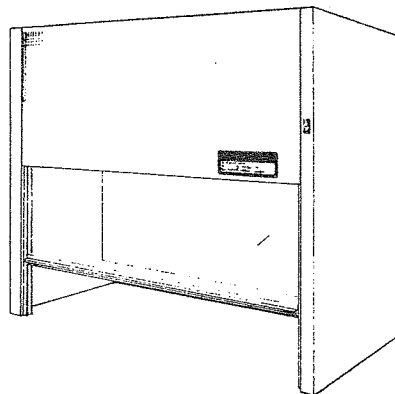
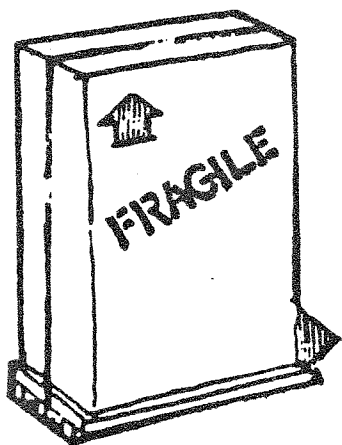
LABELED DIAGRAM



INSTALLATION

Your laboratory hood has been shipped to you in one carton (optional equipment has been packaged separately).

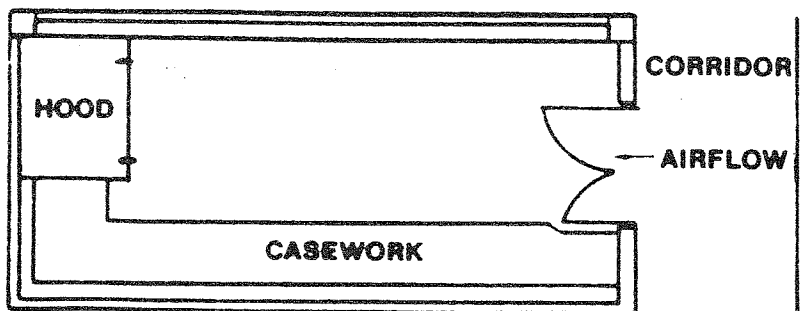
Make sure to inspect hood thoroughly prior to installation and report any damage that may have occurred in transit.



Installation Factors

Your Labconco laboratory hood should be positioned such that it is out of the traffic pattern and away from air disturbances such as doors, windows, air conditioning, ventilation supply or other return outlets, etc.

Hood location is very important as extraneous air currents can disturb the airflow entering the hood.



In addition to providing the proper location for the hood, you will also need to provide:

1. Supporting structure for the hood with a chemical resistant work surface.
2. 115 volt, single phase, 60 Hz electrical service.

3. Exhaust ductwork to be used for connection to the hood structure.

The only assembly required on your hood is the attachment of the sash weight which is shipped uninstalled.

Sash Weight Installation

To protect the tempered safety glass sash during shipment, the sash weight has been placed under your Basic hood.

Prior to testing the sash, visually check to see that the sash cables are engaged in the pulleys. The sash should raise both up and down without any signs of binding in its operation. Should the sash fail to operate, check each of the sash cables to make sure that they are properly routed through their respective sash pulley systems.

Attach the two "S" hooks at the end of the sash cable in the two holes provided in the sash weight.

Should the sash assembly still fail to operate, check for obstructions in the sash track or hanging up of the weight. Contact Labconco for additional instructions, if you have further questions.

EXHAUST CONNECTION

Model 22474 Remote Blower Hood

The exhaust connection on your hood has been designed to feature a molded plastic duct connection sized to accept standard sized PVC duct material. The exhaust duct size has been designed to allow for a minimum of static pressure loss through the hood at normal operating face velocities, and generate a sufficient transport velocity through the ductwork to safely exhaust materials being handled in the laboratory hood structure.

Model 22473, 22475 Integral Blower Hood

The exhaust connection on your hood has been designed to feature a epoxy coated blower housing rectangular duct connection sized to accept Labconco's P/N 22648 rectangular to round transition, and requires 10" standard PVC duct material on the exhaust side of the transition. The exhaust duct size has been designed to allow for a minimum of static pressure loss through the hood at normal operating face velocities, and generate a sufficient transport velocity through the ductwork to safely exhaust materials being handled in the laboratory hood structure.

Replacement of Pillow Block Bearing

1. Remove 8 bolts on side of blower plate.
2. Remove 4 bolts on mount assembly.
3. Disengage belt
4. Rotate assembly 180° and remove from housing.
5. Loosen 2 set screws on pillow block.
6. Remove mounting bolts.
7. Slip pillow block off shaft after removing sheave.

Replacement of the Exhaust Blower Motor

1. Disconnect hood from power source.
2. Remove front panel.
3. Remove four (4) bolts attaching motor to motor mount.
4. Disconnect electrical wiring to motor, if required, for complete removal.
5. Remove sheave from motor shaft.
6. Reverse above procedure for installing new motor.

REPLACEMENT PARTS LIST

STANDARD MODEL — 115 Volt, 60 Cycle

Description	Part No.
1. Baffle	22485
2. Impeller Drive Assembly	22637
3. Motor, Exhaust	12094
4. Cord, Power STD (not shown)	22513
5. Fixture, Light	49150
6. Sash Assembly w/o cables	22627
7. Switch, Light or Exhaust (SPST)	13257

EXPLOSION-PROOF MODEL — 115 Volt, 60 Cycle

1. Baffle	22485
2. Impeller Drive Assembly	22637
3. Motor	12066
5. Fixture, Light	12703-01
6. Sash Assembly w/o cables	22627

NOTE: When ordering replacement parts specify the LABCONCO equipment model number and serial number located on the identification plate on the hood right top corner.

REPLACEMENT PARTS

