

Basic 47 - Fume Hood

Models 22473, 22474, 22475

INSTRUCTION MANUAL

Product designs are subject to change without notice

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INTRODUCTION

Components Shipped

Carefully check the contents of the carton for damage that might have occurred in transit. Do not discard the carton or packaging material until all components have been checked against the following component list and the equipment has been installed and tested.

As shipped, the carton should contain the following:

Part Number	Description
22473	Basic 47 Fume Hood with Built-in Blower
22474	Basic 47 Fume Hood without Blower
22475	Basic 47 Fume Hood with Explosion Proof Blower

General Description

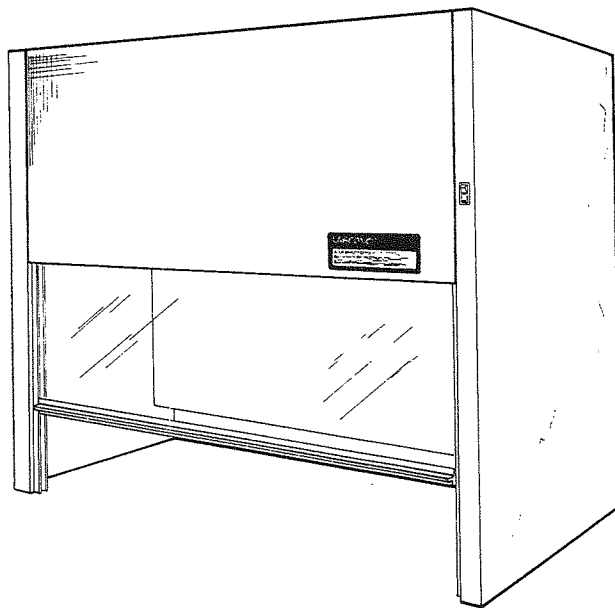
The Labconco Basic 47 Fume Hood has been engineered and designed for applications requiring only elemental fume hood features.

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 trailer.

In spite of its simplicity, the 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.



INTRODUCTION

Component Identification (See Figure 2) Model 22473 and 22475

- (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.

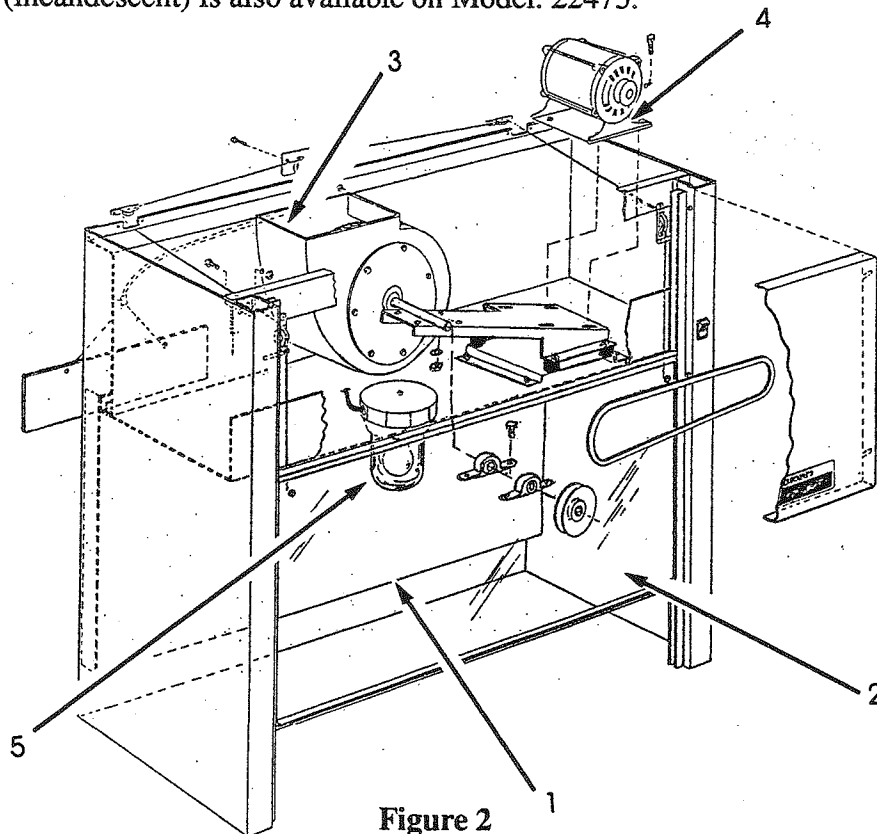


Figure 2

Component Identification (Figure 3) Model 22474

- (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.

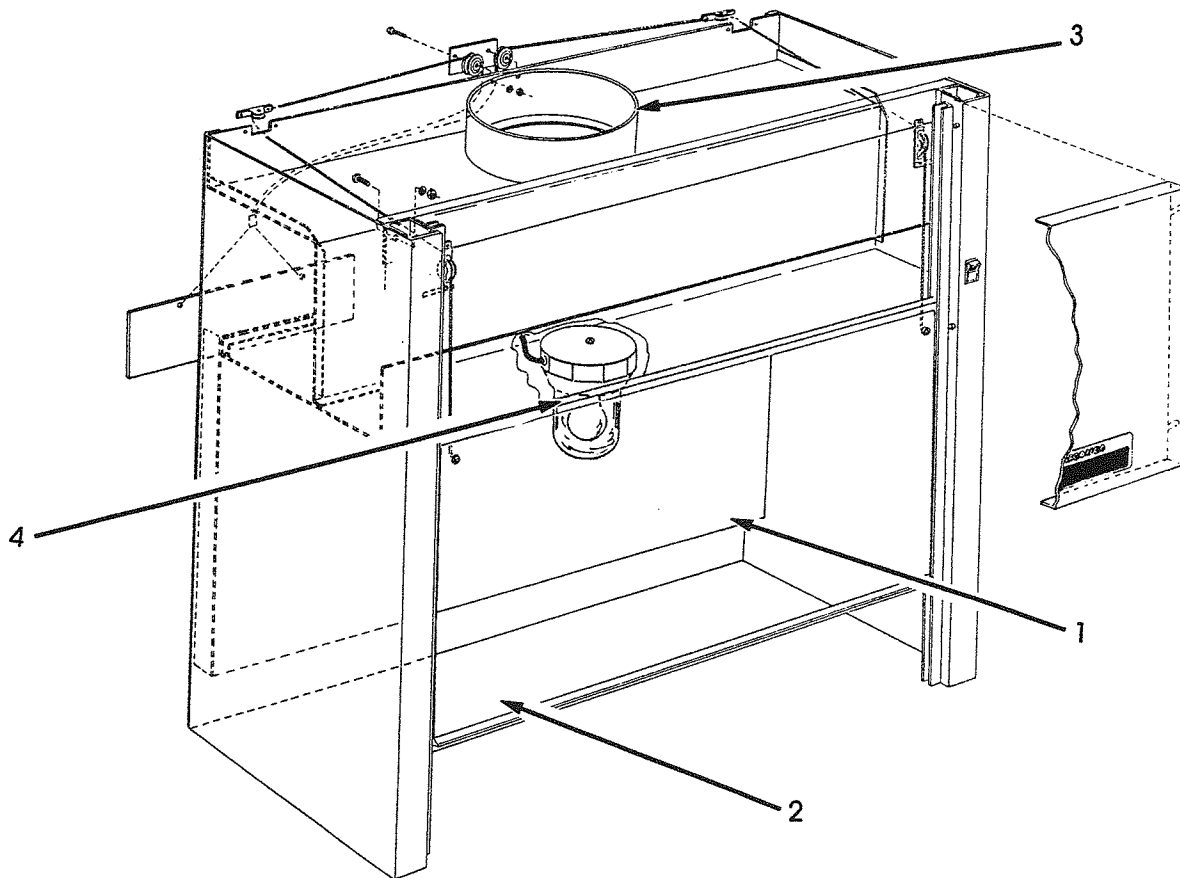


Figure 3

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.

WARNING: Remove all internal packaging in the hood prior to operation.

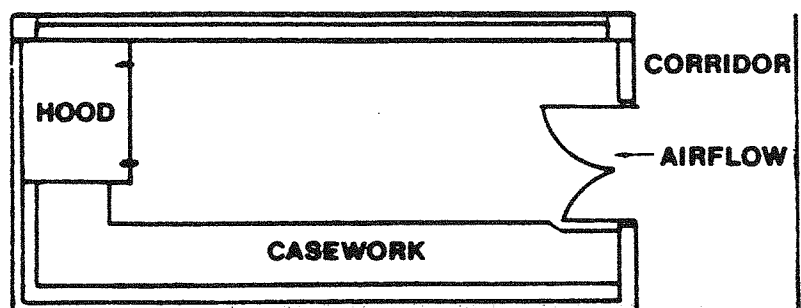
WARNING: Remove the sash weight from the hood carton before desposing of the carton.

WARNING: Remove the motor mount shipping support on Models 22473 and 22475 before operating the hood.

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.
- (4) Remove motor mount shipping support prior to hood operation.

The only assembly required on your hood is the attachment of the sash weight which is shipped uninstalled and the connection of the hood to proper electrical services.

INSTALLATION

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 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 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.

NORMAL OPERATION

- . Although the laboratory hood has been engineered to maintain the optimum in operator safety, caution should always be used while working in the hood.
- . Good general housekeeping procedures with the following specific recommendations should allow you to operate your laboratory hood safely.
- . Overloading the work surface with apparatus or work material. The safe operation of the laboratory hood is based upon having proper airflow through the structure.
- . Blocking the bottom of the baffle will change the air flow pattern in hood causing turbulence and possible leakage at the face of the hood. (Don't store containers or supplies against baffles as this will affect air flow through the hood).
- . Usage of flammable or explosive materials in this hood unless it has been built with explosion proof components is not recommended.
- . Do not work with or store chemicals in this hood without the exhaust system running.
- . Perchloric acid use in this hood is not recommended.
- . High level radioisotope materials are not recommended for usage in this hood.
- . The use of heat generating equipment in this hood without the exhaust system operating properly can cause damage to the hood liner.
- . Seal all ductwork joints properly to prevent the leakage of any exhaust contaminants from the duct.

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 power epoxy coated steel. The unit has 100 watt vapor proof light, 3/16 inch thick tempered glass sash, internal wiring and two switches. The color of the body is glacier white with a charcoal front panel. Shipping weight, 272 pounds.

22474 Basic 47 Fume Hood Without Motor/Blower

The 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, internal wiring and switch. The color of the body is glacier white with a charcoal 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.

REPLACEMENT PARTS

STANDARD MODEL - 115 VOLT, 60 CYCLE

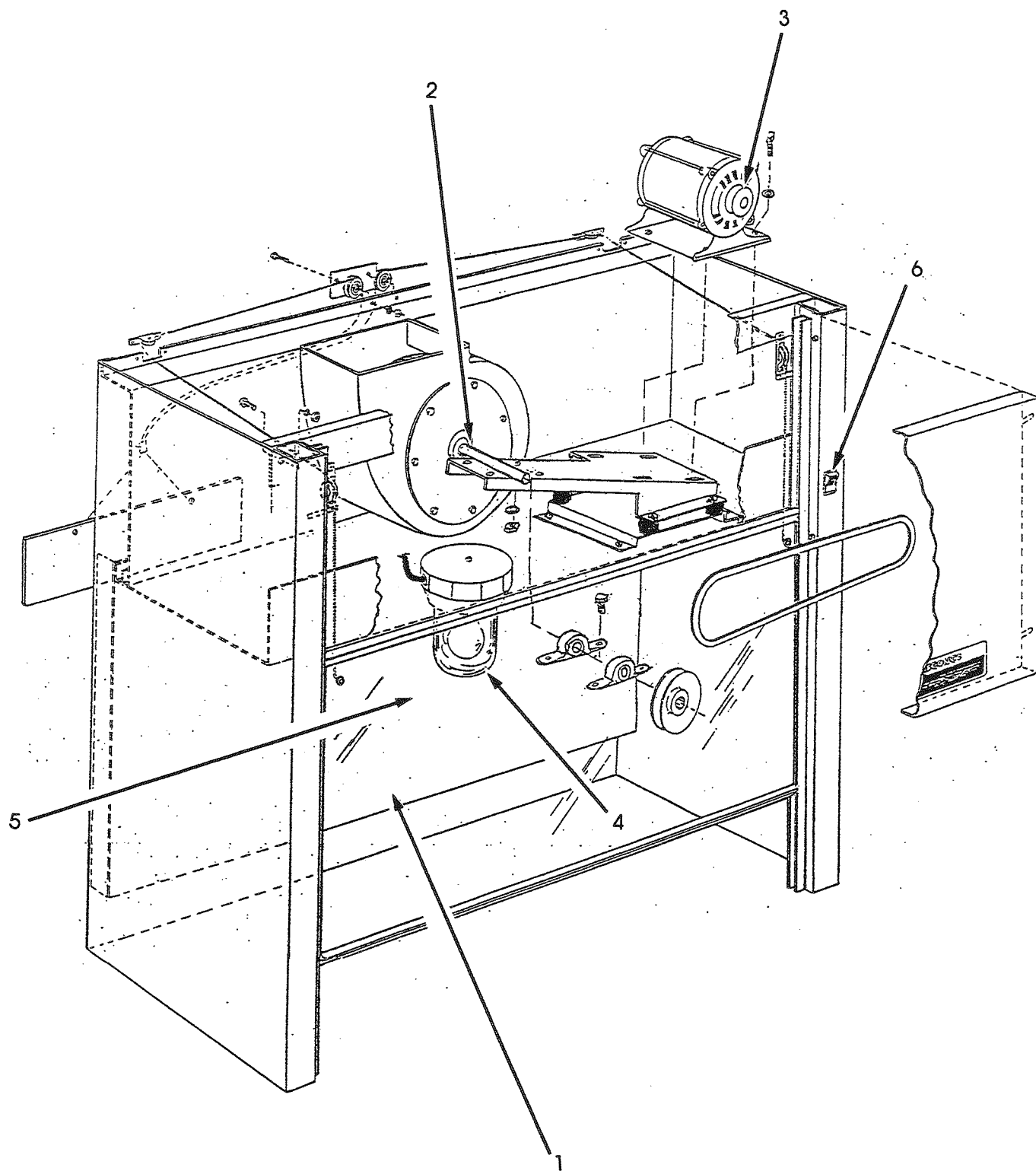
	PART NUMBER	DESCRIPTION
(1)	22485	Baffle
(2)	22637	Impeller Drive Assembly
(3)	12094	Motor, Exhaust
(4)	49150	Fixture, Light
(5)	22627	Sash Assembly w/o cables
(6)	13257	Switch, Light or Blower (SPST)
(7)	18629	Belt - V
(8)	18596 18630	Bearing Pillow Block
(9)	18595	Sheave - Driver
(10)	18594	Sheave - Driven

EXPLOSION-PROOF MODEL - 115 VOLT, 60 CYCLE

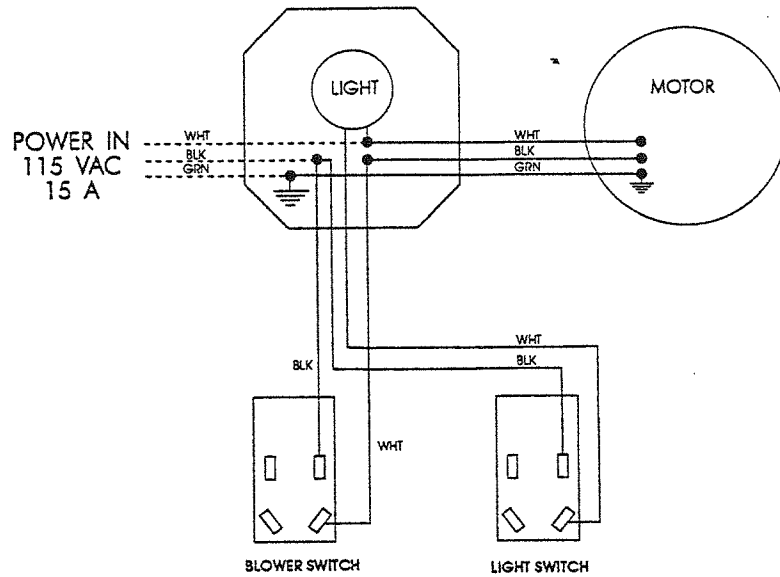
(1)	22485	Baffle
(2)	22637	Impeller Drive Assembly
(3)	12066	Motor
(4)	12703-01	Fixture, Light
(5)	22627	Sash Assembly w/o cables
(6)	18625	Belt - V
(7)	18596 18630	Bearing, Pillow Block
(8)	18600	Sheave - Driver
(9)	18627	Sheave - Driven

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

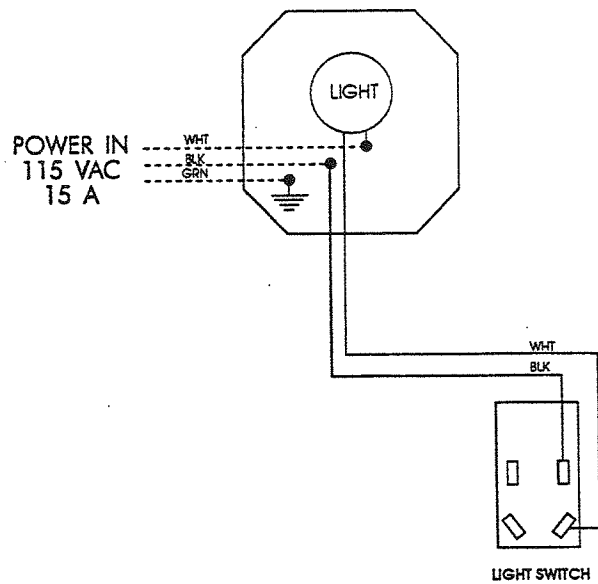
REPLACEMENT PARTS



WIRING DIAGRAM



BASIC 47 WITH BLOWER
WIRING DIAGRAM



BASIC 47 WITHOUT BLOWER
WIRING DIAGRAM

WARRANTY

We are committed to providing our customers with quality equipment and service after the sale. Part of this objective involves keeping you informed of changes and new product additions. We therefore request that you take a moment to fill out the product registration card so we may know your location as well as some of the reasons that prompted you to purchase our products.

Labconco Corporation warrants products of its manufacture for one year, from receipt of the equipment by the purchaser, against defects in materials and workmanship. This limited warranty covers parts and labor but not transportation and insurance charges. In the event of a warranty claim contact 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 of warranty 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 expendable items such as filters are not covered by this warranty. Damage due to corrosion or accidental breakage are also not covered.

WARNING: 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 urged 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.

SHIPPING CLAIMS

If a shipment is received in visibly damaged condition, be certain to make a notation on the delivery carrier's receipt and have his agent confirm the damage on your receipt. Otherwise, the damage claim may be refused.

If concealed damage or pilferage is discovered, notify the carrier immediately and retain the entire shipment intact for inspection. Interstate Commerce Commission rules require that the claim be filed with the carrier within 15 days after delivery.

NOTE: Do not return goods. Goods returned without prior authorization will not be accepted. Labconco Corporation and its dealers are not responsible for shipping damage. Claims must be filed directly with the freight carrier by the recipient. If authorization has been received to return this product, by accepting this approval, the user assumes all responsibility and liability for biological and chemical decontamination and cleansing. Labconco reserves the right to refuse delivery of any products which do not appear to have been properly cleaned and/or decontaminated prior to return.

CONTACTING LABCONCO

If you have any questions that are not addressed in this manual, or if you need technical assistance, please contact Labconco's Customer Service Department at either (800) 821-5525, or (816) 333-8811, between the hours of 8:00 a.m. and 5:00 p.m. Central Standard Time.