



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

INSTRUCTION MANUAL

LABCONCO 47, 59, 70 FUME HOODS

MODEL NO'S

47700	47708	59000	59008	70700	70708
47701	47709	59001	59009	70701	70709
47702	47710	59002	59010	70702	70710
47703	47711	59003	59011	70703	70711
47704	47715	59004	59015	70704	70715
47705	47716	59005	59016	70705	70716
47706	47717	59006	59017	70706	70717
47707	47718	59007	59018	70707	70718

<u>MANUAL NO.</u>	<u>DATE</u>	<u>REV.</u>	<u>REVISED PAGES</u>	<u>ECO NO.</u>
47822 -01	5-15-73	A	1,3,6-8 & 9	1807
47822 -02	11-29-76	B	1, 6	2694
47822 -03	9-16-77	C	A11, 1-8	2910
47822 -04	3-3-78	D	1,2,3 & 9	3035
47822 -05	7-28-78	E	1, 3	3148
47822 -06	2-1-79	E	1, 5	3239
47822 -07	6-13-79	G	1, 2	3353
47822 -08	6-26-79	H	A11	3416
47822-09	12-15-80	J	1, 2, 4, 5, 6, 7, 9	3734
47822-10	8-24-81	K	10	4101
47822-11	4-18-83	L	8	4542

NOTE: PRODUCT DESIGNS ARE SUBJECT TO CHANGE WITHOUT NOTICE

47822



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

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I. Introduction

A. General Description

The Labconco fume hoods are designed to remove efficiently vapors which may make the working area more hazardous. The various sized hoods may be used as part of a wide range of applications such as solvent slide cleaning, total phosphorous testing, and distillations. Because its bright one-piece working area is glass fiber reinforced polyester resin, the hood is easy to clean, chemically inert and corrosion proof.

B. Labeled Diagram of Unit

(See Page 2)

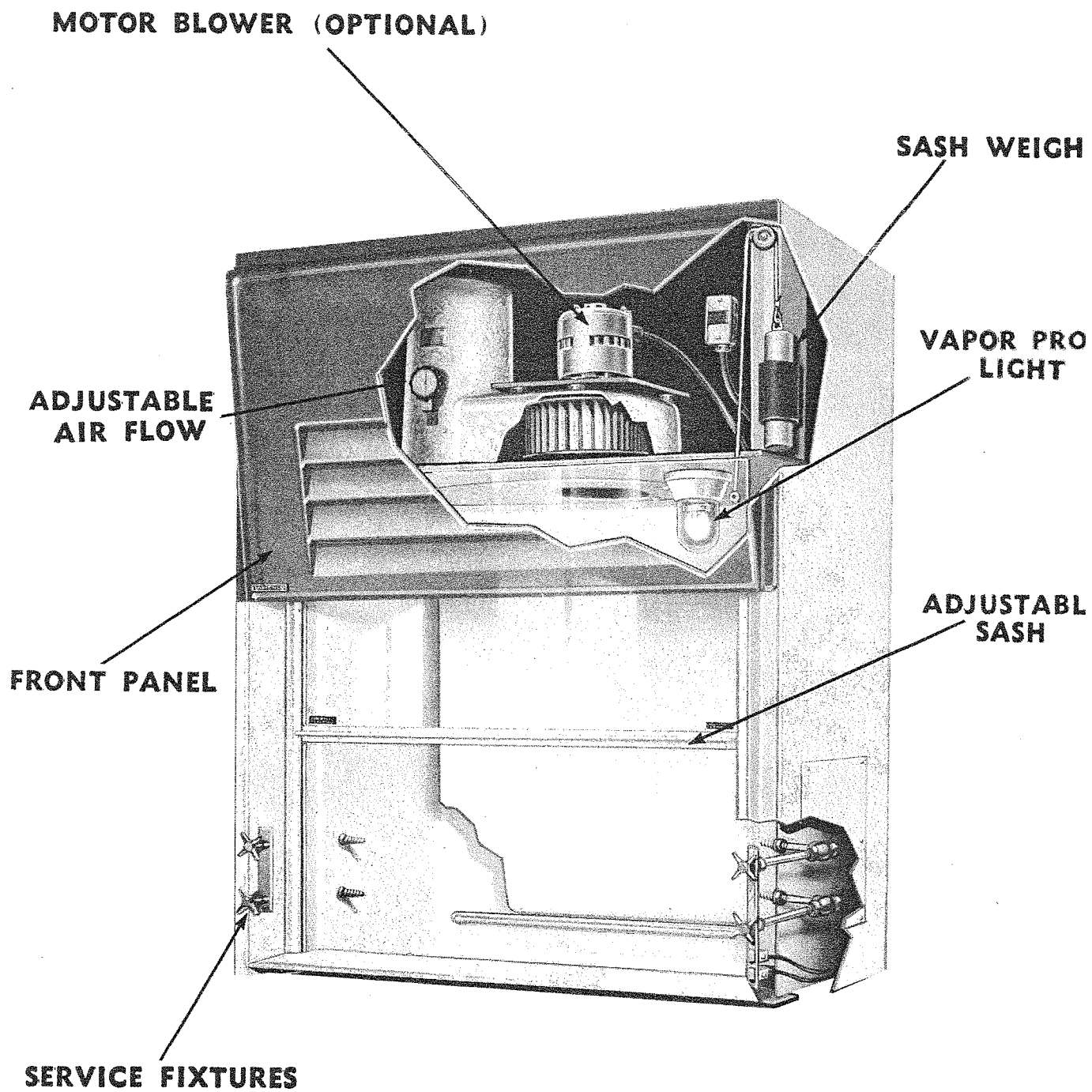
C. Detailed Function of Components

Factory installed service fixtures. (optional) Located on the lower left and right hand sides of the unit, these fixtures can be employed for gas, air, vacuum or water uses. They may be operated with the sash in any position.

Light fixture. The hood interior is illuminated by a 100 watt, incandescent light housed in a vapor proof fixture to provide a non-glare working surface. Explosion proof fixtures are also available.

Built-in blower. (optional) The optional 1/2 HP integral blower delivers a minimum of 720, 940 or 1140 CFM (depending on the size of the hood (47", 59" or 70")). Explosion proof models are also an option. Add-air models have two blowers. Blower housing, impeller and damper are non-sparking and corrosion resistant.

Adjustable air flow. The built in damper system allows full control of face velocity with a simple adjustment of the damper located behind the easily removed access panel.



II. Installation

A. Dimensional Drawing

(See pages 4-6)

B. Installation Instructions

1. Parts included

The unit is shipped complete, ready for installation. The only assembly necessary is the attachment of the sash weights and front panel.

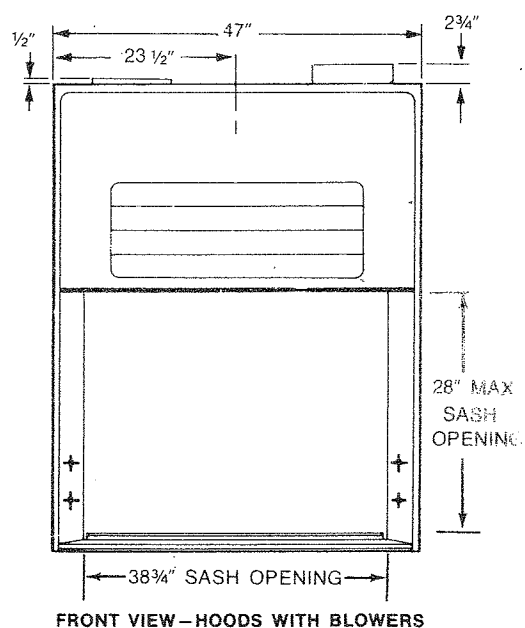
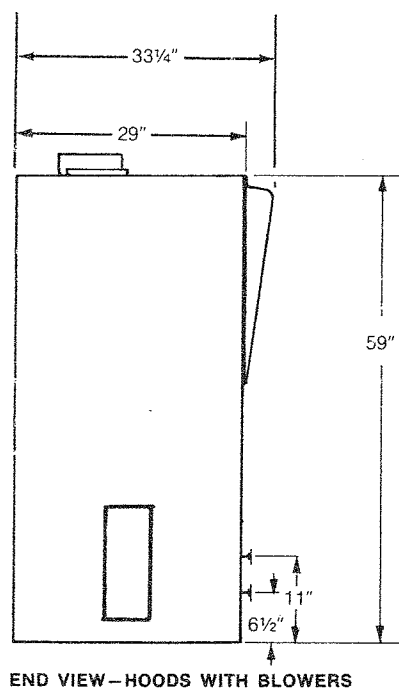
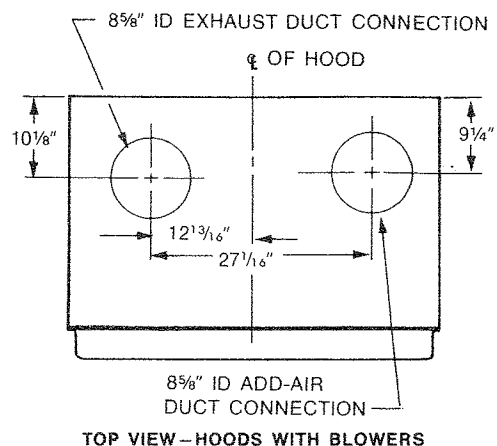
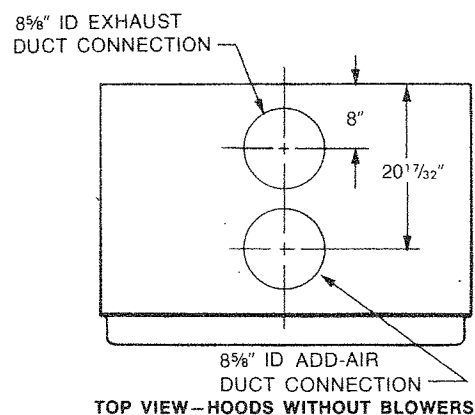
2. Installation factors

a. Location

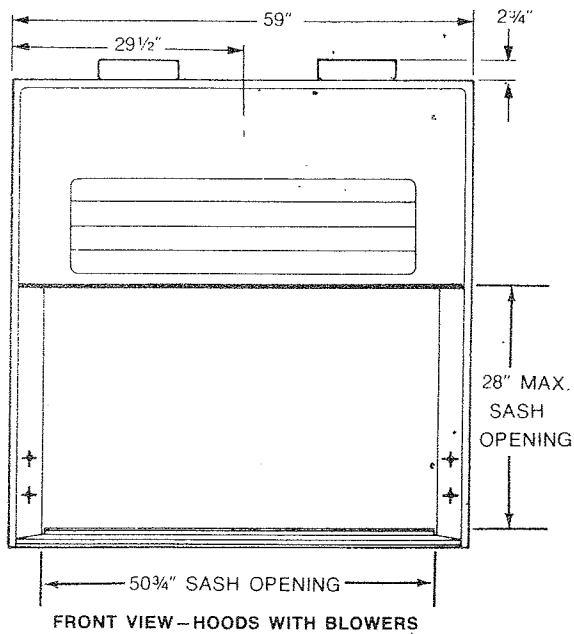
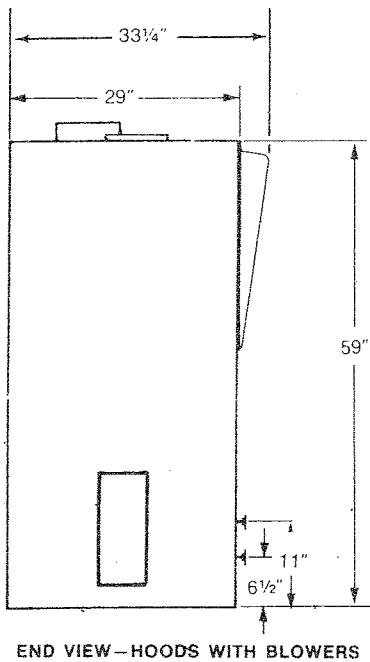
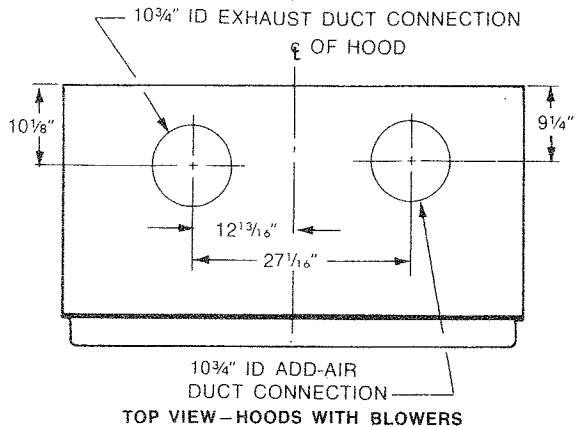
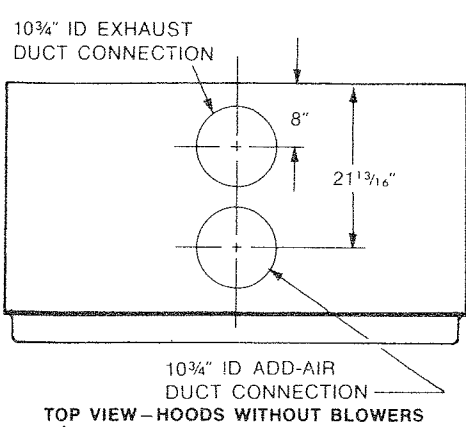
- (1) Place hood on desired supporting structure (NOTE: Lift hood only by sides and rear to avoid damage to the hood structure. DO NOT lift by the foil).
- (2) Remove packaging material from sash and beneath motors.
- (3) Check to insure the cables are passing over the pulleys and install sash counterweights by passing "S" hook through weight "eye". CAUTION: Tighten "S" hooks securely.
- (3a) Remove tape from lower part of baffle and place baffle in slot provided in extrusion.
- (4) Refer to identification plate on the hood lower left front corner for hood electrical characteristics. The outlet branch circuit and its circuit interrupting device (fuse or circuit breaker) must be of sufficient size to supply the electrical requirements of the hood. Only a grounded electrical supply should be used.
- (5) The variable exhaust damper on all hoods is shipped in the open position. The airflow of the hood can be varied by opening or closing the damper. To alter exhaust damper setting, apply downward pressure on handle-lock and turn handle to desired position as indicated by damper position label.
- (6) The standard hood is wired internally for 115 volt, 60 Hz current and is provided with a terminal connection box for permanent electrical installation by a qualified electrician. This box is located on the back wall of the hood at the upper center when facing the front of the hood. A wire connection diagram is provided on the inside surface of the cover of the box.

(continued on page 7)

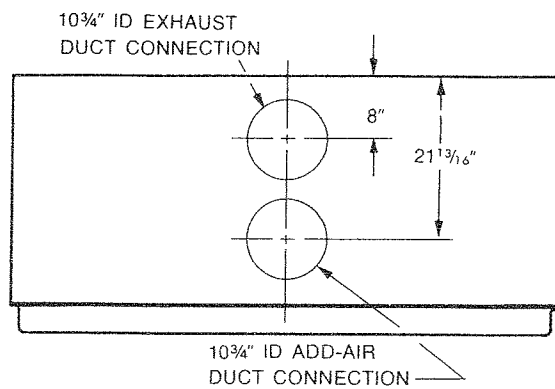
FIBERGLASS-47 FUME HOOD/ dimensional data



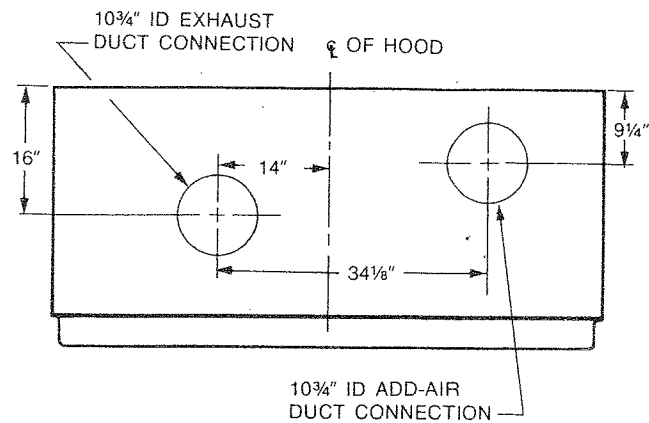
FIBERGLASS-59 FUME HOOD / .dimensional data



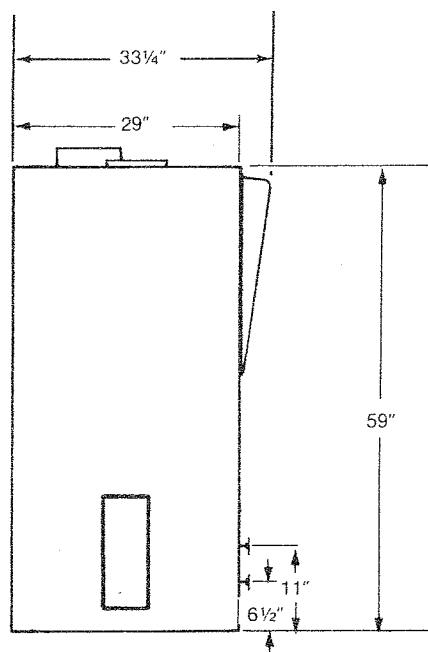
FIBERGLASS 70 FUME HOOD/ dimensional data



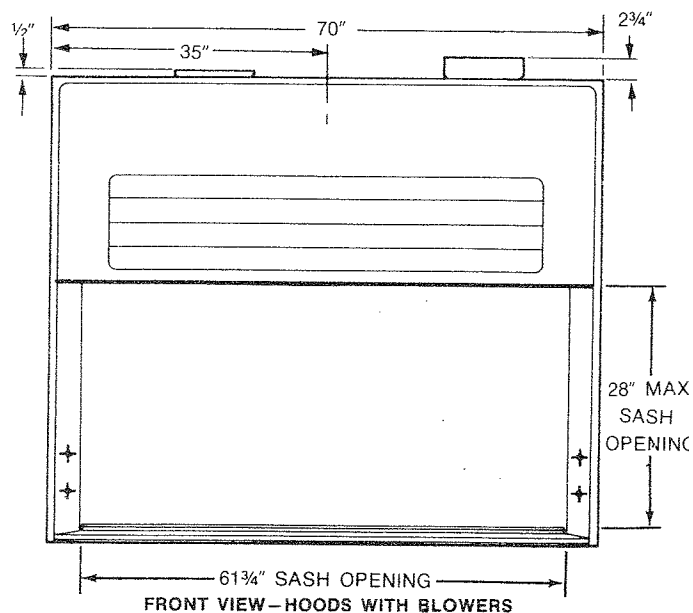
TOP VIEW—HOODS WITHOUT BLOWERS



TOP VIEW—HOODS WITH BLOWERS



END VIEW—HOODS WITH BLOWERS



a. Location (cont'd)

The explosion-proof equipped hoods are not wired internally. All wiring must be performed by a qualified electrician. Motor lead wires are paired for correct impellor rotation at the factory. If in doubt, motor information data tag should be consulted for further information. Correct impellor rotation is clockwise as viewed from motor shaft end.

The hood must be wired to conform to local code and, in most cases, this will require the use of conduit shielding to protect the wiring brought to the hood proper, grounding and connection of the wiring in such a manner that the terminal box cover may be removed without disturbing the electrical connections. The electrical supply system should include overload protection at the main disconnect. See wiring schematics on page 10.

- (7) The hood is now ready for duct installation and plumbing, if required.
- (8) Assemble the hood front panel. The panel is secured to the hood by positioning the two hooks of the front panel in the slots provided in the top wrapper. It is secured in position by two push-to-lock fasteners located in the lower corners.
- (9) Add-Air hoods are equipped with variable dampers on the add-air inlet so that inlet and exhaust airflow can be balanced. Adjust inlet damper as required. The damper is located on the hood top right side. Rotating damper counter-clockwise opens the air inlet.

b. Utility Connections

All that is necessary to make the hood operational is for the service fixtures to be connected and the electrical cord plugged in. In addition, qualified personnel should attach the duct work.

3. Start Up and Check Out

Before the hood is put into normal operation the blower and the lights should be turned on and checked for proper performance.

NOTE: The face velocity should be checked before normal operation to insure proper air flow for the applications employed.

III. Normal Operation

The hood should be turned on prior to any use in the hood. The blower should be turned off once the cleanup procedure has been completed.

CAUTION: DO NOT USE PERCHLORIC ACID IN THIS HOOD.

CAUTION: USE OF HYDROFLUORIC ACID IN THIS HOOD WILL FOG SASH.

WARNING: All laboratory hoods that are not provided with explosion proof electrical components should not be used with flammable or explosive atmospheres.

Only those hoods that are equipped with explosion proof components and installed in accordance with all pertinent electrical codes should be used with flammable or explosive atmospheres.

IV. Routine Maintenance

1. Mild soap and water should be used to keep the fiberglass clean.
2. The following steps should be used for sash removal:
 - a. Remove the hood front panel.
 - b. Lower sash to the fully closed position.
 - c. Remove "S" hook from the eye of weight and remove weight.
 - d. Slide sash cables out between the hood top and side panel.
 - e. Remove 4 screws from either the left or right sash channel.
 - f. Slide the sash channel forward until the sash assembly is free of the channel.
 - g. Disengage sash from the opposite track.

3. Care of Motors

Labconco hoods are provided with 1725 rpm split phase motors on both the exhaust and add-air blowers. The ambient temperature in the motor compartment of the hood should not exceed (40°C) for proper operation and life of the motors.

The motors have been factory lubricated for two years. After this period, 20/30 drops of SAE 10 automotive oil annually is generally sufficient. Refer to the manufacturers recommendation on the nameplate on the rear of the motor for additional oiling instructions.

REPLACEMENT PARTS LIST

LABCONCO FIBERGLASS-47" 59" and 70" FUME HOODS

STANDARD MODEL - 115 Volt, 60 Cycle, with & without Add-Air

<u>Catalog Number</u>			<u>Part Description</u>
47767-07	59044-07	70747-07	Baffle
14505	145505	70791	Impeller, exhaust
14502	14502	14502	Impeller, Add-Air
12040	12040	70834	Motor, exhaust
12040	12040	12040	Motor, Add-Air
12738	12738	12738	Fixture, light
12729	12729	12729	Shield, light
47782-01	47782-01	47782-01	Housing, blower, Add-Air
47960	59888	70792	Sash assembly W/handle
47940	59894	70798	Sash Replacement Kit
47968	59892	70796	Weight, sash assembly
19207	19207	19207	Cable, Sash (2 required)
13202	13202	13202	Switch, light or exhaust (SPST)
-----	-----	13170	Switch, exhaust/Add-Air (DPST)
13527	13527	13527	Fixture, plumbing R/C
47796	47796	47796	Connector, hose
47833	59823	70823	Foil, assembly sash
18585	18585	18585	Pulley, sash
48097	59906	70962	Panel, front
18523	18523	18523	Bushing (5/8" to 1/2")

* Specify Color by Dash Number -

-01	Char Blue	-06	Glacier White
-02	Electra Blue	-09	Unpainted
-03	Sunflower		
-04	Copper Mist		
-05	Tawny Olive		

EXPLOSION-PROOF MODEL - 115 Volt, 60 Cycle with & without Add-Air

All other parts common to both models

<u>Catalog Number</u>			<u>Part Description</u>
47162	47162	17162	Impeller, Add-Air
12038	12038	12039	Motor, exhaust
12037	12037	12037	Motor, Add-Air
12703	12703	12703	Fixture, light
14514	14514	70755	Impeller, exhaust

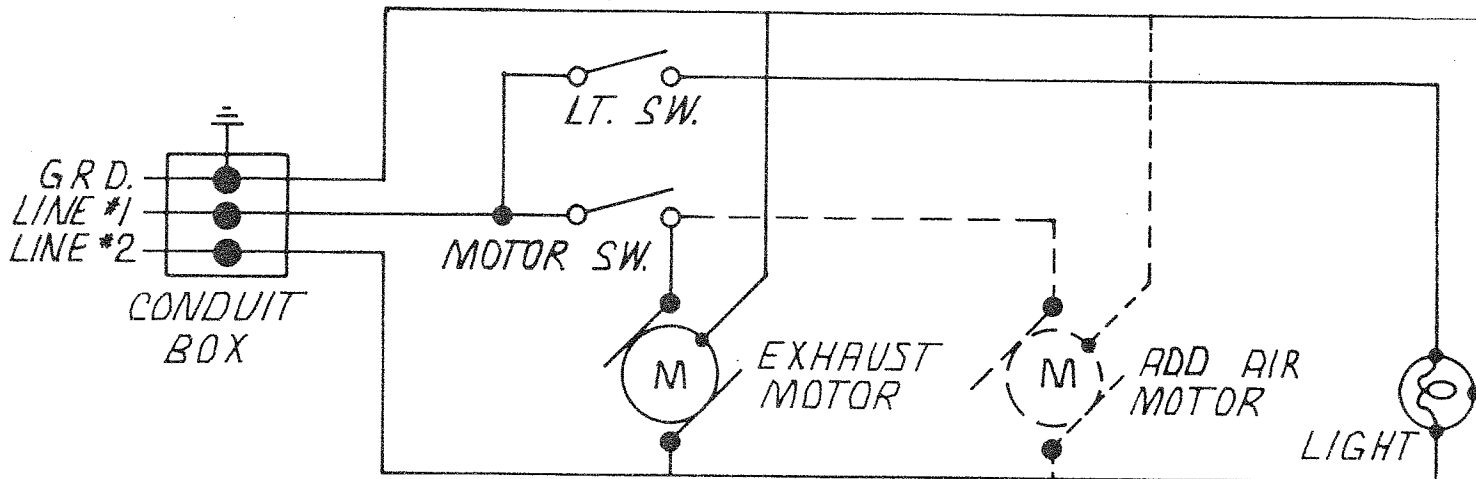
NOTE: When ordering replacement parts, specify the LABCONCO equipment model number and serial number located on the identification plate on the hood lower left front corner.

41, 59 & 10 FUME HOODS

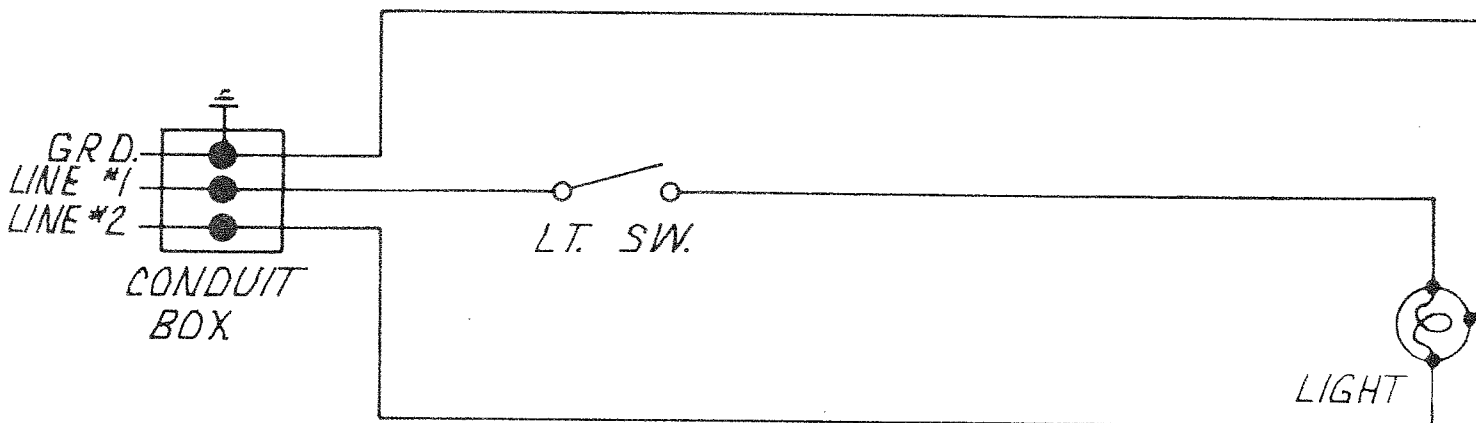
WIRING SCHEMATICS

----- OPTIONAL MOTOR

STD. HOOD W/MB & LIGHT



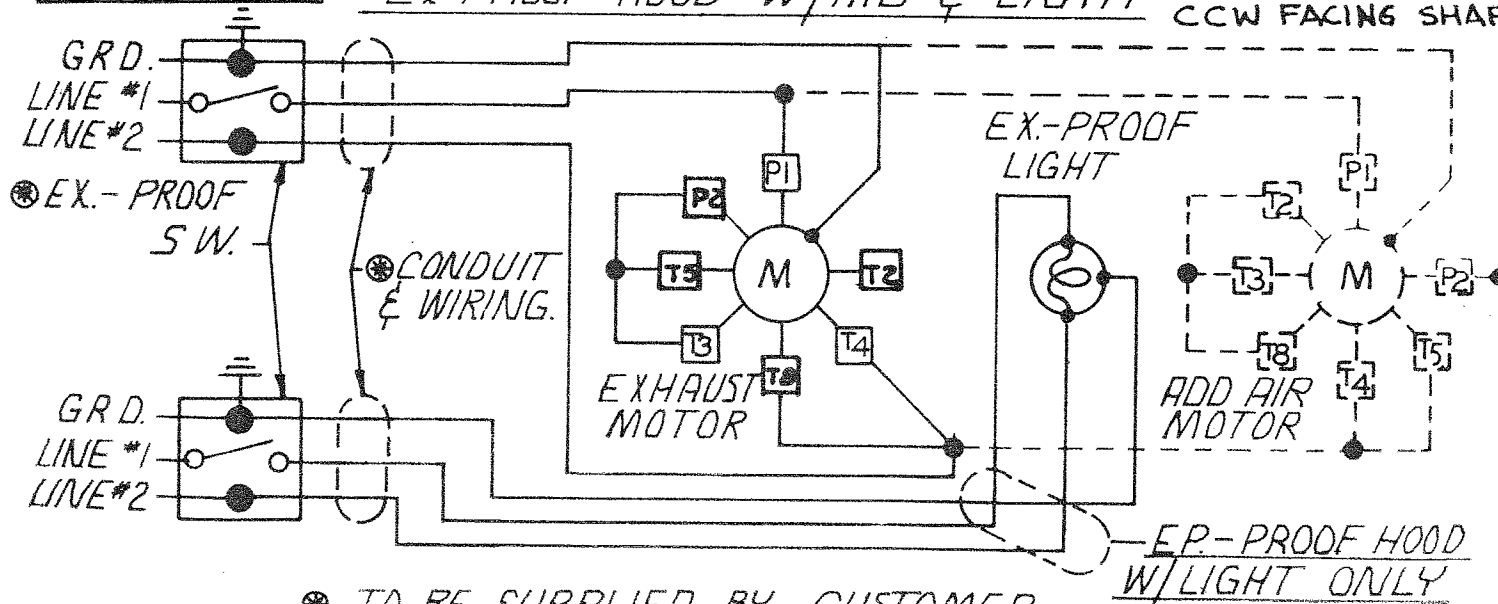
STD. HOOD W/LIGHT ONLY



110VOLT ONLY

EX-PROOF HOOD W/MB & LIGHT

SHAFT ROTATION
CCW FACING SHAFT



⊗ TO BE SUPPLIED BY CUSTOMER.