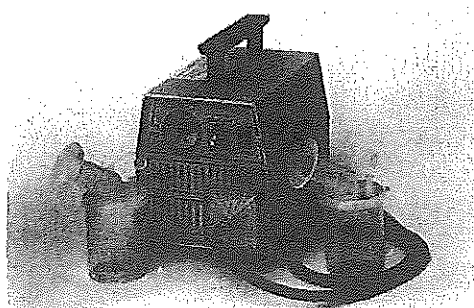
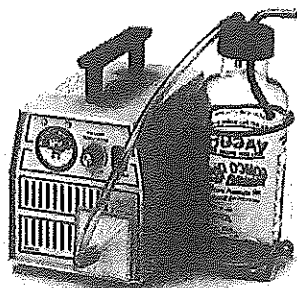


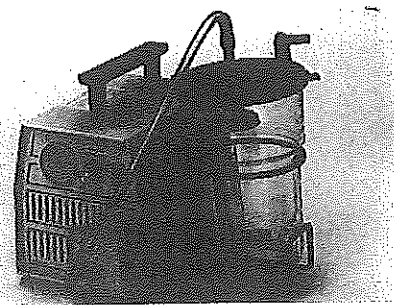
# **GOMCO PORTABLE BREAST PUMP MODEL 1118 AND ASPIRATOR MODEL 1180 AND ASPIRATOR MODEL 1181**



1118



1180



1181

## **OPERATION, MAINTENANCE AND SERVICE MANUAL**

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## 1.0 GENERAL INFORMATION (MODEL 1118 BREAST PUMP)

### 1.1 Purpose:

The lightweight Model 1118 is designed to provide total suction control for the nursing mother in the event it becomes necessary to express herself at home.

### 1.2 Features:

1. One (1) collection kit which includes two (2) plastic collection cups with two (2) plastic collection cups with two (2) breast shield caps and tubing.
2. Sturdy sheet metal enclosure with vacuum gauge, vacuum regulator, On/Off switch and three (3) wire power cord.
3. Three (3) bacteria filters.

#### 1.2.1 Collection Kit (P/N - 2677)

The six ounce capacity collection cup with breast shield cap is designed to allow the mother to start and stop suction with finger tip control. The cup, breast shield and tubing can be sterilized by boiling in water in the home.

#### 1.2.2 Bacteria Filter (P/N - 3100)

The primary purpose of the in-line bacterial filter supplied with this unit is to prevent fluid from accidentally entering the pump. This filter features a hydrophobic, microporous membrane which filters air with maximum efficiency (0.3. micron particles in air), while blocking the flow of aqueous fluids.

### 1.3 Breast Kit Set Up: (See Illustration No. 1)

1. The collection cup, breast shield and tubing should be sterilized prior to each use (See 5.4).
2. Screw bacteria filter into the front of the pump panel.
3. Connect one side of tubing to the bacteria filter in the front panel of the pump.
4. Snap the breast shield cap onto the collection cup. Be sure the suction inlet cap is off the suction inlet hole.
5. Connect the end of the tubing to the tapered tubing connector on the breast shield cap.

#### 1.4 Operating Procedure:

1. The "ON/OFF" switch should be in the "OFF" position.
2. Plug the line cord into a grounded electrical outlet, making sure that it is the same voltage.
3. Be sure all the tubing is thoroughly dry.
4. Push the "ON/OFF" switch in the front control panel to the "ON" position.
5. Adjust the vacuum level to five (5) inches of mercury on the gauge by pinching off the rubber tube between the collection cup and the bacteria filter and turning the vacuum regulator knob clockwise to increase or counter-clockwise to decrease. Release the pinched off tube.
6. Center the breast shield over the nipple and place the shield against the breast. Place one finger over the suction inlet hole on top of the cap to start suction and remove your finger from the hole to relieve suction. This finger tip control enables the mother to control the intermittent milking action and the time required to express milk from her breasts. The suction level can be re-adjusted to suit your own comfort.

**CAUTION:** To prevent aspirating milk into the tubing and filter, do not overfill the collection cup or tip the cup toward the tubing connector on the breast shield cap.

## 2.0 GENERAL INFORMATION (MODEL 1180 AND 1181 ASPIRATORS)

### 2.1 Purpose:

The GOMCO Model 1180 and 1181 is designed for general suction use in the home.

### 2.2 Features:

Supplied with GOMCO Model 1180 and 1181 as standard equipment are:

1. One (1) glass 600 ml bottle with cap assembly (Model 1180).
2. One (1) plastic 1100 ml disposable collection container and lid with bacteria filter (Model 1181).
3. One (1) length of 24" clear flexible tubing (pump tube) and one (1) length of 72" clear flexible tubing (patient tube).

4. Sturdy sheet metal enclosure with vacuum gauge, vacuum regulator, bottle bracket, ON/OFF switch and three wire power cord.
5. Three (3) bacteria filters.

**NOTE:** The use of the bacteria filter P/N 3100 is necessary for overflow protection if the glass bottle is used.

#### 2.2.1 Bacteria Filter:

The high efficiency bacteria filter is custom engineered to prevent fluid and aerosol contamination of mobile and portable suction units. This filter features a hydrophobic, microporous membrane which filters air with maximum efficiency (0.3 micron particles in air), while blocking the flow of aqueous fluids and aerosol contaminants. The GOMCO high efficiency filter protects the suction pump from canister overflow. The filter should be screwed into the connection in the front panel of the pump before use.

### 2.3 Set-Up:

#### 2.3.1 1100 ml Disposable Collection Container (See Illustration No. 2)

1. Snap the lid onto the collection container firmly.
2. Connect the 72" length of tubing to the 90° tubing connector in the lid marked "PATIENT".
3. Connect the short length of tubing to the vertical connector on lid marked "VACUUM".
4. Insert the container into the bottle bracket on the side of the pump.
5. Connect the other end of short tube to the suction fitting in the front panel of the pump.

#### 2.3.2 600 ml Glass Collection Bottle:

1. The bottle and cap assembly should be sterilized prior to use (See 5.3).
2. The bottle should be assembled as shown in Illustration No. 3.
3. Connect the 72" length of clear tubing to the side of the bottle top having the longer metal tube extending into the bottle.
4. Connect the short length of clear tubing to the short metal tube extending into the bottle.

5. Insert the bottle into the bottle bracket on the side of the pump.
6. Connect the other end of the short tube to the bacteria filter in the front panel of the pump.

#### 2.4 Operating Procedure:

1. The "ON/OFF" switch should be in the "OFF" position.
2. Plug the line cord into a grounded electrical outlet, making sure that it is the same voltage as indicated on the unit nameplate.
3. Be sure the clear tubing from the bottle to the pump is dry.
4. Push the "ON/OFF" switch in the front control panel to the "ON" position.
5. Check the degree of vacuum by pinching off the patient tube. The amount of vacuum in inches of mercury, will register on the vacuum gauge. To increase the vacuum turn the "regulator" knob clockwise. To decrease the vacuum, turn the "regulator" knob counter-clockwise. Release the pinched tubing.
6. Your pump is now ready for patient use.

### 3.0 SPECIFICATIONS

#### 3.1 Vacuum Range:

0 to 19 inches MAX (0 to 559 mm Hg.)

#### 3.2 Flow Rate:

Open Flow 18 LPM.

#### 3.3 Electrical Requirements:

115 Volts 60 Hz. (2.0 Amps)

#### 3.4 Motor and Pump Description:

1/30 H.P. thermally protected, shaded pole motor, direct drive Diaphragm pump.

#### 3.5 Dimensions:

Case and handle - (D) 7-1/2" X (W) 6" X (H) 8-1/2"

### 3.6 Weight:

Model 1118 - 7 pounds  
Model 1180 - 9 pounds  
Model 1181 - 8 pounds

### 3.7 Duty:

Continuous - 8 Hours Running

## 4.0 OPERATING PRINCIPLE:

The negative and positive pressures of a Diaphragm pump are developed by the reciprocating motion of the Diaphragm inside the pump head. These pressures are maintained by the motion of the piston and the pressure and suction flapper valves. On the up-stroke, the pressure valve will open to allow air flow through the exhaust or pressure port. On the down stroke the pressure valve closes and the suction valve opens which draws a vacuum or creates a negative pressure at the suction side.

## 5.0 MAINTENANCE AND SERVICE:

**WARNING:** The motor is thermally protected and can automatically restart when protector resets. Always disconnect the power source before servicing.

### 5.1 Pump Lubrication:

The pump and motor are permanently lubricated and require no oiling or greasing. Do not at any time lubricate any of the parts with oil, grease or petroleum products.

### 5.2 Bacteria Filter:

The Bacteria Filter used in all three models should be replaced when a reduction of the air flow is noticed. It must be replaced in the event fluids have entered it, such as in collection bottle overflow. With the vacuum regulator fully closed and the tubing disconnected from the "Fluid Side" of the filter (filter open to atmosphere), a vacuum reading of 7 to 10 inches of mercury on the gauge indicates the filter should be replaced.

### 5.3 Glass Bottle and Cap Sterilization:

1. Remove the cap assembly from the bottle.
2. Dispose of drainage fluids and materials in the bottle.

3. Soak the bottle and cap assembly in a warm detergent solution. Wash all the parts with a nylon bristle brush and rinse with water.
4. Submerge the parts in a suitable container filled with water and bring the water to a vigorous boil. Allow the parts to vigorously boil for at least 15 minutes.
5. Drain the water and allow the bottle and cap assembly to cool before handling.  
**NOTE:** The glass bottle and cap assembly can be autoclaved or gas sterilized, if desired.

#### **5.4 Breast Collection Kit Sterilization:**

1. Remove the breast shield from the collection cup.
2. Soak the cup, breast shield and tubing in warm detergent solution. Wash all the parts with a nylon bristle brush and rinse with water.
3. Submerge the parts in a suitable container filled with water and bring the water to a vigorous boil. Allow the parts to cool before handling.
4. Drain the water and allow the parts to cool before handling.

## **6.0 ILLUSTRATIONS:**

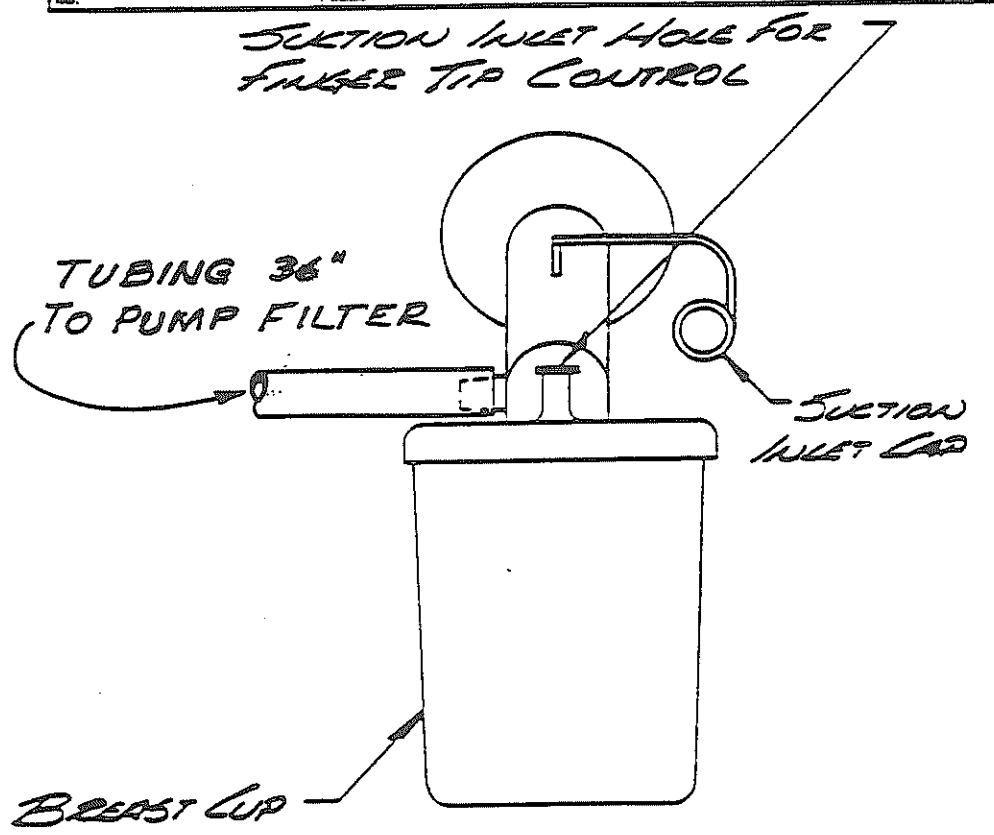
**No. 1 - Breast Kit Set-Up.**

**No. 2 - 1100 ml Disposable Bottle Set-Up.**

**No. 3 - 600 ml Glass Bottle Set-Up.**



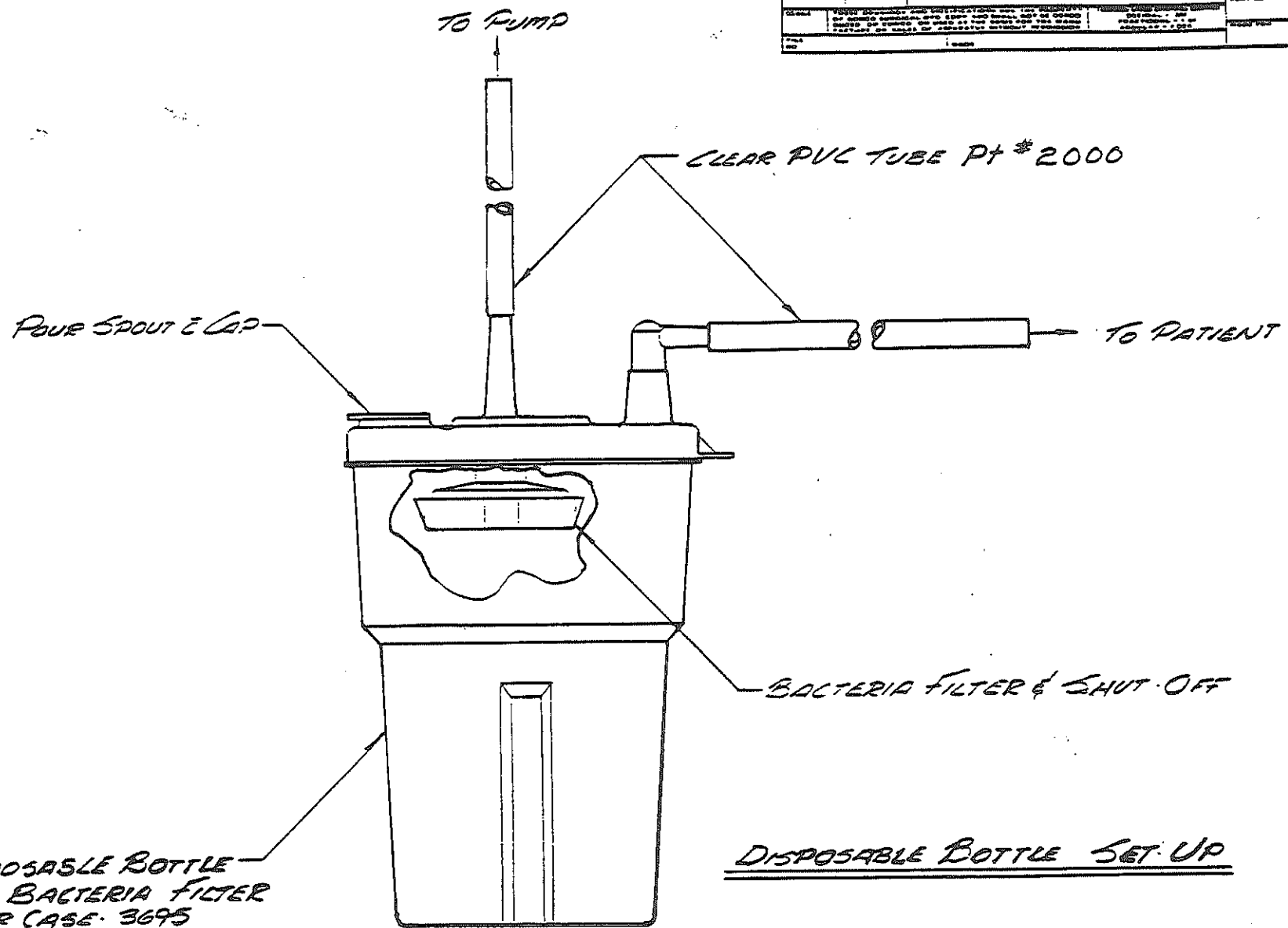
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BREAST KIT SET-UP  
 USE PT# 2677 BREAST KIT

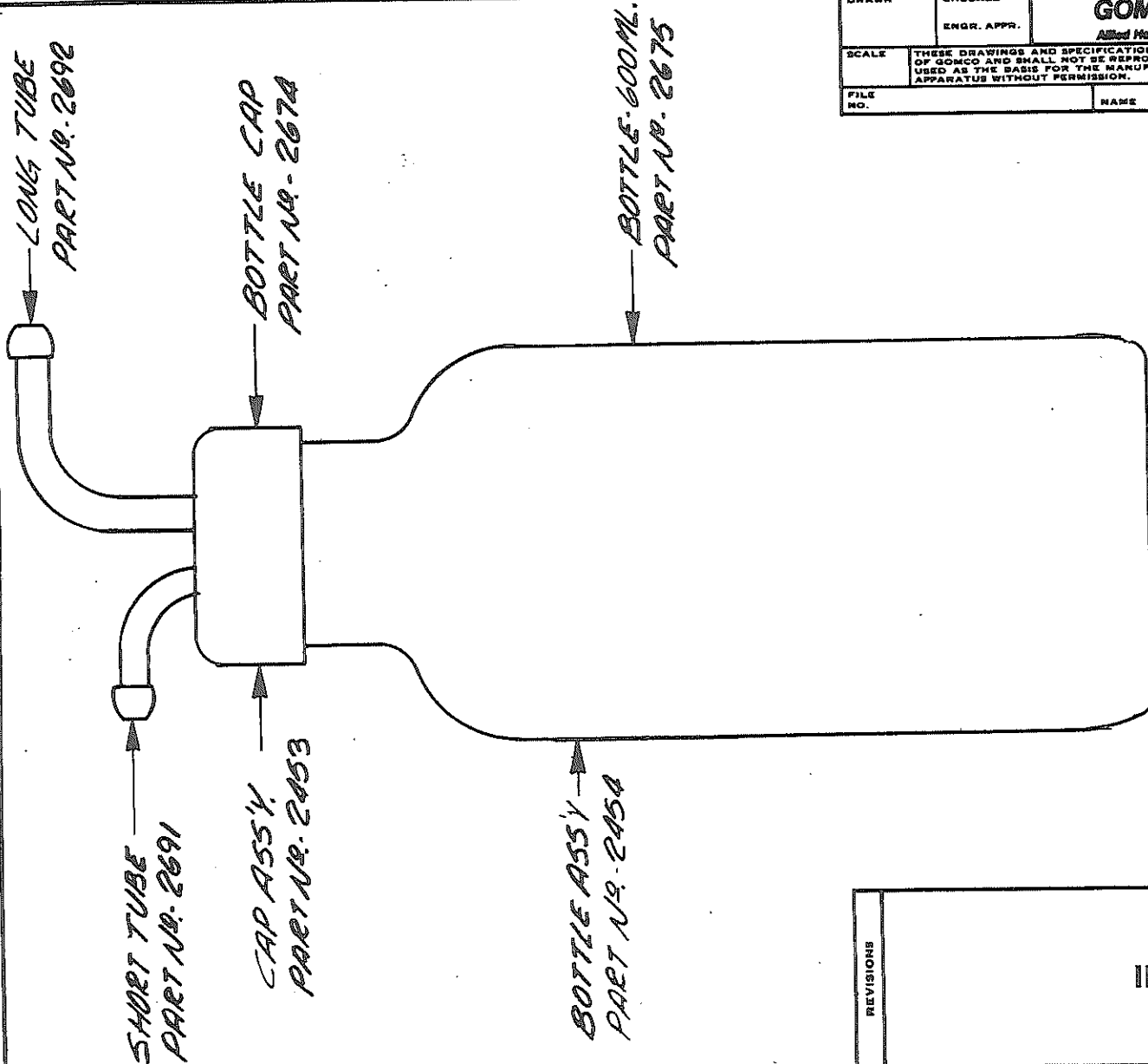
REVISIONS

ILLUSTRATION NO. 1



DISPOSABLE BOTTLE  
WITH BACTERIA FILTER  
12 PER CASE 3695  
48 PER CASE 3696

DISPOSABLE BOTTLE SET-UP



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ILLUSTRATION NO. 3

## 7.0 TROUBLE SHOOTING:

PROBLEM	PROBABLE CAUSE	REMEDY
PUMP WILL NOT RUN WHEN SWITCH IS PUSHED "ON"	1. POWER SOURCE BAD OR INCORRECT VOLTAGE	CHECK POWER OUTLET
	2. SWITCH BAD	REPLACE
	3. WIRING INCORRECT	CHECK WIRING
	4. MOTOR BAD	REPLACE
LOW SUCTION	1. LOOSE BOTTLE CAP OR TUBING CONNECTIONS	CHECK ALL CONNECTIONS
	2. PUMP PERFORMANCE LOW	SEE 3.0
	3. BACTERIA FILTER CLOGGED	REPLACE FILTER SEE 5.2
	4. VACUUM REGULATOR LEAKING	REPLACE
PUMP RUNS, BUT NO SUCTION	1. DISCONNECTED VACUUM LINE	CHECK ALL TUBING
	2. BACTERIA FILTER CLOGGED	REPLACE FILTER SEE 5.2

8.0

**REPLACEMENT PARTS LIST  
MODELS 1118, 1180 AND 1181**

01-90-5042	Filter Connection
01-90-3706	Power Cord
907-EZ	Vacuum Gauge
01-90-2351	Vacuum Regulator Knob
01-90-2429	Regulator Needle
01-90-3644	Regulator Spring
01-90-2431	Regulator Body
01-90-2859	Jamb Nut
01-90-3673	On/Off Switch
01-90-3669	Handle
01-90-9044	White Silicone Tubing (6")
01-90-3100	Bacteria Filter (3/Pkg.)
01-90-2000	Tubing Package

**Model 1118 Breast Pump:**

01-90-2677	Collection Kit
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**Model 1181 Aspirator:**

01-90-3695	1100 ml Disposable Bottle (With Filter 12 / Case)
01-90-3696	1100 ml Disposable Bottle (With Filter 48 / Case)
01-90-3551	Bottle Bracket (For 1100 ml Disposable Bottle)

**Model 1180 Aspirator:**

01-90-2454	600 ml Glass Bottle Assembly
Rubber Cap Assembly	01-90-2453
600 ml Glass Bottle	01-90-2675
01-90-2453	Rubber Cap Assembly
Rubber Bottle Cap	01-90-2674
Short Tube	01-90-2691
Long Tube	01-90-2692
01-90-2433	Bottle Bracket (For 600 ml Bottle)