

AM BICKFORD

SINCE 1974 • SAME NAME • SAME COMPANY inc.



Veterinary Anesthesia Equipment

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Riken Anesthetic Gas Indicators



A.M. BICKFORD, INC. began producing its fine line of anesthesia equipment for the discriminating veterinarian over 40 years ago. A small family owned business, it has grown in size over the years, but more importantly, it has built a reputation of quality and design excellence unsurpassed in Veterinary Medicine. Bickford's equipment design is based on decades of experience in both the human and veterinary anesthesia fields. Knowledge and experience in both of these fields has enabled the equipment to be tailored to the unique needs of the veterinarian. Veterinary science has become more and more advanced over the years, and clients have come to view new and more complicated surgical techniques as the norm rather than the exception. This makes the veterinary surgeon's quest for quality, dependable equipment that much more critical. Bickford offers a complete line of Veterinary Anesthesia Equipment whose excellence in engineering and quality has been a standard in the industry over these past 40+ years.

GETTING TO KNOW US



BICKFORD
Stand Model 52122
 (See page 5 for details)



ALL BICKFORD ANESTHESIA MACHINES represent many years of experience in human and veterinary equipment design. Each comes to the customer **FULLY ASSEMBLED** and complete with a **FIVE YEAR WARRANTY**. All models evolve from our basic stand model with the following features:

Design Features

- Cast aluminum base with brushed & buff polished finish.
- Mounted on 3" ball bearing casters, 2 with brakes, 26" diagonal wheel base.
- Table top is solid aluminum plate, 13" square, bolted to the base through a 3" diameter chromed steel column.
- All components are mounted to the table top, including the back-bar or lab-rack, which mounts the flowmeters & vaporizers.
- Left front corner is fitted with an aluminum pole for mounting the CO₂ absorber close to the patient location with adjustable height provided. The Supersorber™, CO₂ absorber is standard and included in all models except model 61010. (Supersorber features described, below.)
- Also mounted at the left front corner is the common outlet and the oxygen flush valve module.
- Flowmeters are individual modules equipped with precision needle valves, etched scale, ribbed glass flowmeter tubes, protected and mounted in forged aluminum housings.
- Cylinder yokes are rear mounted and each is directly connected to the high pressure regulator port.
- On models equipped with 2 gases (O₂ & N₂O), a "fail safe" device is provided which cuts off N₂O in the event that O₂ pressure fails.
- All models provide D.I.S.S. connections for external gas supplies.
- All controls, gauges, flowmeters, vaporizers, etc. are visible and accessible from the front of the anesthesia machine at eye level.
- Vapomatic™ Vaporizer not included (See page 6).

BICKFORD SUPERSORBER™ CO₂ ABSORBER

BICKFORD ANESTHESIA MACHINES are provided with the new Supersorber™. This is a patented veterinary absorber design which discards the traditional "hospital type" absorber construction in favor of advanced engineering features that guarantees the highest degree of quality and performance for the veterinary practitioner.

Features and Description

- **Bag Holder** – Is directly attached to the underside of the base casting so that the breathing bag is visible and easy to reach.
- **Base** – A single base casting mounts all parts and makes all circuit connections.
- **Canister** – A full size refillable canister is supplied. Also, any of the available pre-packs can be used. The canister or pre-pack is simply placed on the base gasket.
- **Dome** – A transparent dome, similar to a bell jar, is placed over the canister and fastened with two easy-to-operate toggle latches, sealing it to the base gasket.
- **Directional Valves** – In the circle breathing system, are mounted side by side on the base casting and are axial flow, low resistance, flapper valve type having transparent housings for observing breathing activity and valve action.
- **Pressure Relief Valve** – or pop-off valve, is the Bickford PC-1 with swiveling scavenging outlet, and transparent housing (see page 12).
- **Pressure Manometer Gauge and Negative Pressure Relief Valve** – Are mounted on the top of the transparent dome as is the pop-off valve.



BICKFORD Supersorber™





**BICKFORD
Stand Model 51111**
(See page 5 for details)



The **BICKFORD MODEL 51111 STAND MODEL** is our most popular machine designed to provide veterinarian flexibility. An "E" cylinder yoke is included and attached to an aluminum plate. The "E" cylinder yoke allows the veterinarian to deliver anesthesia where a connection to a main O₂ system is not accessible or provides a backup source of O₂ when connected to a main O₂ system.

Design Features

- 5 YEAR WARRANTY
- SHIPS COMPLETELY ASSEMBLED
- Additional supplies included
- Stand provides excellent stability
- Compact and mobile
- ONE "E" CYLINDER YOKE INCLUDED
- Dual Vaporizer mount capability
- Pop Off Valve (see through, easy to clean)
- Quick release toggle latches for easy to change absorbent (prepack or loose granules)
- Pressure manometer
- Air intake valve
- Horizontal inhalation and exhalation valves to prevent valves from sticking in the open position
- O₂ Flowmeter 0.2 L to 5 LPM.
- O₂ Flush
- Absorber pole allows absorber to adjust up or down and also swing out of the way when not in use
- Vapomatic Vaporizer not included (see page 6)

ACCESSORIES INCLUDED with purchase

<p>F/AIR Kit (80000)</p>	<table border="0"> <tr> <td data-bbox="1193 1255 1372 1648"> <p>Black Conductive (Latex Rubber) 2 Liter (18702)</p> </td> <td data-bbox="1388 1255 1572 1648"> <p>Black Conductive (Latex Rubber) 3 Liter (18703)</p> </td> </tr> </table>	<p>Black Conductive (Latex Rubber) 2 Liter (18702)</p>	<p>Black Conductive (Latex Rubber) 3 Liter (18703)</p>
<p>Black Conductive (Latex Rubber) 2 Liter (18702)</p>	<p>Black Conductive (Latex Rubber) 3 Liter (18703)</p>		
<p>Pediatric Size Breathing Tube (27392)</p>	<p>Adult Size Breathing Tube (52019)</p>		

ADDITIONAL ACCESSORIES

	<p>PAGE 06 VAPORIZERS</p>
	<p>PAGE 08 BREATHING CIRCUITS</p>



BICKFORD
Stand Model 51112
 (See page 5 for details)



The **BICKFORD MODEL 51112 STAND MODEL** is designed to give the veterinarian that added security and peace of mind of having 2 Oxygen "E" cylinder yokes to hold two oxygen tanks. Each yoke has its own single stage regulator to assure proper supply pressure. All models provide D.I.S.S. connections for external gas supplies.

Design Features

- **5 YEAR WARRANTY**
- **SHIPS COMPLETELY ASSEMBLED**
- Additional supplies included
- Stand provides excellent stability
- Compact and mobile
- **TWO "E" CYLINDER YOKES INCLUDED**
- Dual Vaporizer mount capability
- Pop Off Valve (see through, easy to clean)
- Quick release toggle latches for easy to change absorbent (prepack or loose granules)
- Pressure manometer
- Air intake valve
- Horizontal inhalation and exhalation valves to prevent valves from sticking in the open position
- O₂ Flowmeter 0.2 L to 5 LPM.
- O₂ Flush
- Absorber pole allows absorber to adjust up or down and also swing out of the way when not in use
- Vapomatic Vaporizer not included (see page 6)



ACCESSORIES INCLUDED with purchase

F/AIR Kit
 (80000)



Black Conductive
 (Latex Rubber)
 2 Liter (18702)



Black Conductive
 (Latex Rubber)
 3 Liter (18703)



Pediatric Size Breathing Tube
 (27392)



Adult Size Breathing Tube
 (52019)



ADDITIONAL ACCESSORIES



PAGE
06

VAPORIZERS

BREATHING
 BAGS

PAGE
09





61110 Table Top



The **61110 TABLE TOP** provides veterinarians all the features of a stand model but in a compact and light weight design. The 61110 is built around and **INCLUDES** a Vapomatic™ Vaporizer.

Design Features

- 5 YEAR WARRANTY
- VAPOMATIC™ VAPORIZER INCLUDED (ISOFLURANE OR SEVOFLURANE UNIT)
- Ships completely assembled
- Easy to grip handle
- O₂ Flowmeter
- O₂ Flush
- Pressure manometer
- PC-1 Pop Off Valve (see through easy to clean)
- CO₂ Absorber
- Additional supplies included

The **61020 TABLE TOP MODEL** is a non-rebreathing anesthetic machine for small animals and laboratory use. The 61020 model is equipped with a Vapomatic™ Vaporizer and is light weight and mobile.



61020 Table Top with (61020) or without Bain Circuit (61020B)



Design Features

- 5 YEAR WARRANTY
- VAPOMATIC™ VAPORIZER INCLUDED (ISOFLURANE OR SEVOFLURANE UNIT)
- O₂ Flowmeter
- Easy to grip handle
- Light weight
- Portable
- Non-Rebreathing System

ACCESSORIES INCLUDED with purchase

<p>F/AIR Kit (80000)</p>	<p>Black Conductive (Latex Rubber) 2 Liter (18702)</p> <p>Black Conductive (Latex Rubber) 3 Liter (18703)</p>
<p>Pediatric Size Breathing Tube (27392)</p>	<p>Adult Size Breathing Tube (52019)</p>

ADDITIONAL ACCESSORIES



PAGE 06 VAPORIZERS



PAGE 14 NON-REBREATHING SYSTEM

Each veterinary clinic has a unique need for anesthesia delivery. That is why A.M. Bickford, Inc manufactures different anesthesia machines that are **CUSTOMIZABLE, PRACTICAL AND AFFORDABLE.**

Our Machines include a 5 year warranty and are delivered fully assembled with additional supplies.



For more information about our anesthesia machines and designs visit our website at WWW.AMBICKFORD.COM



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BICKFORD
Stand Model 51110
One Flowmeter



BICKFORD
Stand Model 52110
Two Flowmeters



BICKFORD
Stand Model 52111
Two Flowmeters & One "E" Cylinder Yoke

ALL STAND MODELS COME TO YOU:
COMPLETELY ASSEMBLED - 5 YEAR WARRANTY*
WITH 2 LITER BAG (See page 9)
WITH 3 LITER BAG (See page 9)
PEDIATRIC BREATHING CIRCUIT (See page 8)
ADULT BREATHING CIRCUIT (See page 8)
F/AIR KIT SCAVENGING SYSTEM (See page 13)
*Vapomatic™ Vaporizer not included
*Note: 5 yr. warranty does not include rubber goods or plastic tubing.



41110 WALL MODEL
Anesthesia Machine



61010 TABLE TOP

VAPOMATIC™ ANESTHETIC VAPORIZER

Models for Isoflurane or Sevoflurane

VAPOMATIC™ is a top quality, superior performing, agent specific calibrated anesthetic vaporizer which will adapt to most anesthesia machines.

VAPOMATIC™ is at this time the newest vaporizer on the market and the only such vaporizer currently made in North America.

VAPOMATIC™ is produced with the experience of over 40 years of vaporizer design, testing, manufacturing and servicing of all makes and types of vaporizers and anesthetic equipment.

VAPOMATIC™ is designed to provide outstanding performance at the low flow rates commonly used for veterinary anesthesia.

Features

- Temperature compensated.
- Output concentration stable during assisted respiration pressure pulses.
- Filler-drain-contents window combined in easy access single unit.
- Large dial with easy to see numbers has "off" lock and calibration indents.
- Dial Rotation: CW to decrease and "off" CCaW for "on" and increase.
- "Off" Position locks to prevent accidental actuation of vaporizer.
- When "Off", vaporizing chamber is isolated and gas is bypassed to outlet.
- Tamperproof adjustments – dial seal must be broken for access.
- Sump may be removed for cleaning or wick replacement without disturbing calibration by removing one screw.
- Inlet and Outlet fittings are standard 23mm male & female tapers and are individually replaceable. Other connector options are available upon request.
- Mounting holes in rear are interchangeable with other vaporizers.



12578 Turret Mount

For mounting 2 vaporizers on Bickford anesthesia machines. Vaporizers are mounted back to back on a rotating bracket. To change from one to the other, i.e. Sevoflurane to Isoflurane, disconnect inlet and outlet connectors, rotate isoflurane to face front, then reconnect.



20300 Adapter Plate
For mounting Vapomatic to Matrix (VMS).



20200 Spacer Kit
For mounting Vapomatic or Fluotec 3 to Matrix (VMC).



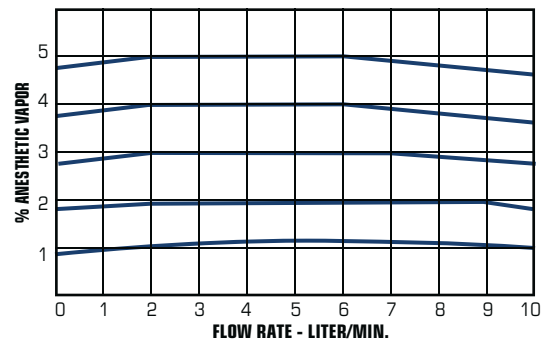
ISOFLURANE Vapomatic™ Vaporizer 2010



SEVOFLURANE Vapomatic™ Vaporizer 2020

Vapomatic™ Performance & Specifications

- Range of gas flow rates: 0.1 to 10 liters/minute.
- Range of ambient temperatures: 60°F to 90°F.
- Range of anesthetic concentration: 0.5% vol.
- Models available for Isoflurane or Sevoflurane.
- Calibration accuracy: $\pm 1\%$ concentration or $\pm 10\%$ of dial setting at calibration points.
- Liquid capacity (dry): Approximately 200 ml.
- Weight (dry): Approximately 7.5 lb.
- Dimensions: visit www.ambickford.com



VAPOMATIC™ VAPORIZER SERVICE & CALIBRATION



The **A.M. BICKFORD'S VAPOMATIC™ VAPORIZER** should be serviced and calibrated annually by A.M. Bickford's trained technicians.

Our Technicians have over 20 years of experience servicing and calibrating anesthetic vaporizers.

Each **VAPOMATIC™ VAPORIZER** we receive for service is thoroughly inspected, disassembled and cleaned. The seals, "O" Rings and wicks are replaced during the routine inspection. The **VAPOMATIC™ VAPORIZER** is reassembled, pressure tested and calibrated.

A.M. BICKFORD is partnered with the **RIKEN KEIKI** company the world leader in gas detection technologies.

The **RIKEN KEIKI CO.** is known worldwide for their commitment to research, development and manufacturing long lasting high quality products. That is why, our technicians utilize a **RIKEN ANESTHETIC GAS INDICATOR** to calibrate each Vapomatic Vaporizer individually.



A.M. BICKFORD provides our customers a **FREE LOANER PROGRAM** while your **VAPOMATIC™ VAPORIZER** is being serviced and calibrated.

To receive a quote for calibration and schedule a loaner please **CALL 800-795-3062** or **EMAIL SALES@AMBICKFORD.COM**.



Calibration Services For
Vapomatic™ Vaporizers
CLICK HERE to receive quote



BREATHING CIRCUITS AND ADAPTERS

Disposable Breathing Circuits – Polyethylene, Semi-Transparent: Can be cleaned with soap and water and non-solvent cold disinfecting solution for several reuses.



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52019 Adult Size

7/8" I.D. x 40" length. 22mm end connections, "Y" piece fits mask directly or standard endo tube connector. Elbow not required unless 90° bend is desired.



27392 Pediatric Size

5/8" I.D. x 30" length. 22mm end connections, parallel "Y" piece, mask elbow included.



06831 Unilimb Breathing Circuit

40" Coaxial "F" style breathing circuit. Pediatric version of unilimb breathing circuit. Attaches via standard connections 15 and 22mm fittings.



06830

Unilimb Breathing Circuit

40" Coaxial "F" style breathing circuit. Inner and outer tube design. Attaches via standard connections.



27393

Single pediatric Br. tube 5/8" I.D. x 30" length. 22mm F. one end, bare 5/8" F. other end.

06111

"Y" piece adult fits 7/8" I.D. Br. tubes, patient end fits mask or standard endo connector.

06112

"Y" piece pediatric fits 5/8" I.D. Br. tubes, patient end fits mask or standard endo connector.

06113

Mask elbow. Patient end standard 15mm I.D. taper x mask taper O.D. 15mm male at 90°.

BREATHING BAGS



Reusable Quality Rubber Breathing Bags
 – standard 7/8" bushing neck. 1/2 liter through 5 liter.

**Black Conductive
 (Latex Rubber)**

- 18900** 1/2 liter
- 18701** 1 liter
- 18702** 2 liter
- 18703** 3 liter
- 18704** 4 liter
- 18705** 5 liter



Reusable Quality Rubber Breathing Bags
 – standard 7/8" bushing neck. 1/2 liter through 5 liter.

**Neoprene
 (Latex-Free)**

- 18600** 1/2 liter
- 18601** 1 liter
- 18602** 2 liter
- 18603** 3 liter
- 18604** 4 liter
- 18605** 5 liter



52210

Disposable 3 liter breathing bag, conductive latex, 7/8" neck bushing. With care, can be reused a number of times.



23012

Resuscitator Bag – Disposable grade but may be cleaned and reused. Ideal for stand by emergency. May be used with air or enriched with oxygen.



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ENDOTRACHEAL TUBES



Special Veterinary Size Endotracheal Tubes

PVC plastic, Murphy eye, inflatable cuff, pilot balloon, inflation valve and connector.

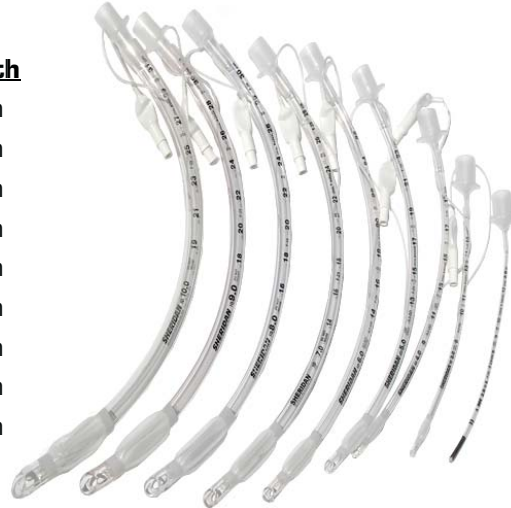
Order No.	I.D. Size	Length
05411	11mm	52cm
05412	12mm	52cm
05413	13mm	52cm
05414	14mm	52cm



67950

Endotracheal Tubes – Human sizes O.D. 2 to 10mm in 1/2 steps. PVC clear plastic, Murphy eye style with inflatable cuff, pilot balloons, inflation valve, and connector. Intended for single use but may be cold sterilized with non-solvent cleaning solutions for reuse.

Order No.	I.D. Size	Length
6795020 (uncuffed)	2.0	12cm
6795025 (uncuffed)	2.5	12cm
6795030	3.0	15cm
6795035	3.5	16cm
6795040-45	4.0,4.5	19cm
6795050	5.0	23cm
6795055	5.5	24cm
6795060-70	6.0-7.0	26cm
6795075-10	7.5-10.0	31cm



06117
Endotracheal
Connecting
Tubes

LARYNGOSCOPES

Veterinary - Metallic, standard hook-on connection, lamp at distal end. I.D. is 7/8" will pass up to size 14 E.T. tube.

Miller	Macintosh
03150 Size 0	03101 Size 1
03151 Size 1	03102 Size 2
03152 Size 2	03103 Size 3
03153 Size 3	03104 Size 4
03154 Size 4	03105 Size 5



Laryngoscopes

Veterinary – Metallic, standard hook-on connection, lamp at distal end.

2 Veterinary sizes (Miller style)

031510 10" Miller Blade

031512 12" Miller Blade

03191 Handle 2 "C" cells, Chrome plated brass



ANIMAL MASKS



Animal Masks

Transparent cone made from high impact plastic with neoprene rubber diaphragm. 15mm standard male taper connection fits "Y" or mask elbow directly.

05304 Animal Mask – small 3½" diameter – 3" deep

05305 Animal Mask – large 5" diameter – 4½" deep

05308 Animal Mask – extra large 5" diameter – 7" deep

05306 Replacement Diaphragm – small

05307 Replacement Diaphragm – large



Cat Masks

Suitable for cats or other small animals. Made from soft, pliable, transparent, vinyl plastic compound. Small and medium sizes have molded on 15mm standard male connections. Large has standard 22mm female connection which fits mask elbow or "Y" piece.

Dimensions:

09509 Small – 2" diameter

09508 Medium – 2½" diameter

09507 Large – 3" diameter

00789 Set of all 3 sizes



90200

Anesthesia Induction Chamber

Suitable for difficult or unruly animals up to size of average adult cat. Made from semi transparent polyethylene impact resistant plastic with snap on top. Has 15mm standard taper connections (male and female) for connecting to anesthesia machine and overflow disposal. Complete with rubber tubing and instructions. Chamber is used to induce first signs of anesthesia, while observing the animal prior to intubation for controlled anesthesia.



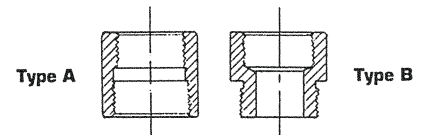
POLLUTION CONTROL EQUIPMENT



80005 BICKFORD PC-1

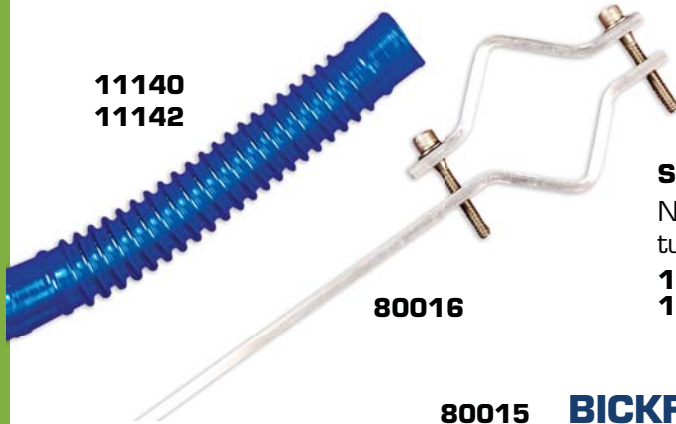
Pressure Relief Pop-Off Valve with scavenging outlet. Replaces most older valves which do not have a scavenging outlet for carrying away waste gas overflow. Adjustable from fully open to fully closed with adjustable spring tension to set pop-off pressure. Transparent rotatable housing with standard 15mm tapered male outlet connection, allows position and operation of the valve to be observed. Threaded base (3/4"-20) fits many anesthesia machines directly, others require an adapter.

Adapters for PC-1



Adapters for PC-1 Pop-Off Valve to various anesthesia machines

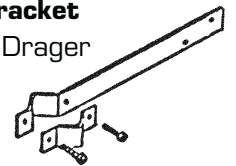
Make	Order No.
Drager	341601
Dupaco	34131628
Ohio	34131620
Foregger	347827
Stephens	347827
Matrx	341901



11140
11142

80016

80016 Mounting Bracket For F.S., Matrx and Drager



Segmented Tubing

Non-conductive corrugated segmented tubing sold by the foot (please specify).

11140 22mm I.D.
11142 15mm I.D.

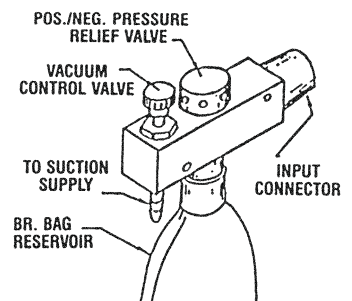
80015 BICKFORD PC-3 Vacuum Scavenging Attachment

Controls the drawing off of overflow gases from anesthesia breathing circuits for disposal into a hospital suction system.

- Mounts solidly to anesthesia machine providing terminal connection for suction supply.
- Control valve built-in so that suction can be adjusted to equal input from anesthesia circuit avoiding excessive suction flows which may occur in installations with multiple O.R. sites.
- Safety Relief Valve for positive and negative pressures to limit application of suction or back pressure to breathing circuit.
- Breathing bag reservoir used to store pulsations of exhaled gases for evacuation with low continuous suction flow. Bag acts as a valuable indicator of in and out flow to and from system.
- Input connection standard 15mm diameter external taper fits 7/8" breathing tubes and 15mm internal diameter taper fits endotrachealtube connectors which are available for any size tubing.
- Mounting brackets available to attach unit to most makes of anesthesia machines.
- The Bickford PC-3 Vacuum Scavenging Attachment is used in semi-closed, open, or non-rebreathing systems, with an outlet connection provided. Most systems can be converted by replacing the present open type pressure relief (pop-off) valve with the Bickford PC-1 Valve and use of the Bickford PC-2 Non-rebreathing System.



80015
BICKFORD PC-3
Vacuum Scavenging
Attachment

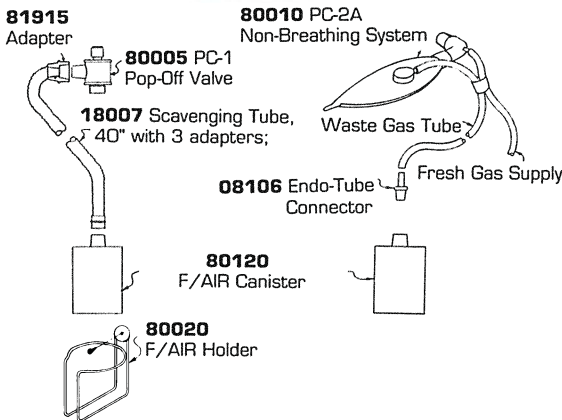


POLLUTION CONTROL EQUIPMENT

BICKFORD OMNICON F/AIR ANESTHESIA GAS FILTER UNIT



13



Specifications

Adsorbent Surface Area	200,000 m ³ /grams
Particle Size, Average, U.S. sieve	6 + 16
Average Density	48 grams/cc
Void Volume	40%
Pressure Drop (psi)	<0.1
Average Life	12-15 hours
Electrical Properties	Non-conductive

References: MEDICAL WORLD NEWS, November 2, 1973, Volume 14 No. 40, p. 24. AORN JOURNAL, November 1973, Volume 18, No. 5 pp.872-4.

Warning

DO NOT USE WITH FLAMMABLE GASES.

*The steady state percentage increase in weight of adsorbent after air - which has been saturated with carbon tetrachloride at zero degrees C. - is passed through the adsorbent at 25 degrees C.

**The amount of halothane retained prior to breakthrough (breakthrough denoting the appearance of adsorbate in the effluent stream).

Features

- Disposable
- Ready to use
- Minimal storage
- No Maintenance
- Standardized Connector
- Compact size

Dimensions

Height	6 inches
Weight of Active Components	200 grams
Diameter	3 ¹ / ₄ inches
Connector, outside diameter	7 ⁷ / ₈ inches male

Adsorption Capacity

- *Carbon Tetrachloride Activity, weight increase 60%
- **Halogenated Gas Retentivity..... 50 grams

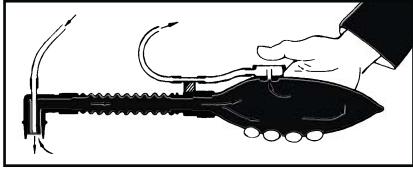
A sensible answer to anesthesia gas problems in the operating room, the F/AIR anesthesia gas filter was specifically designed to remove waste anesthesia gases such as ISOFLURANE, HALOTHANE, ENFLURANE, etc. from the operating room environment. Economical to use, with an average useful life of 12 to 15 hours, the F/AIR is easily adaptable to anesthesia machines. The F/AIR can remove no less than 50 grams of pure halogenated anesthetic gases and can then be conveniently discarded.

Ordering Information

F/AIR Kit consisting of one each, 80120, 80020 and 18007	80000
F/AIR Cannister Unit	80120
F/AIR Holder	80020
Endo. Tube Connector, 6mm	08106
Canister Connector	81915B
BICKFORD PC-1 Pop-Off Valve	80005
BICKFORD PC-2A NRB System	80010
Scavenging Tube, 40" with 3 adapters	18007
Adapter, 15mm F x 22mm M	81915
Blue Plastic Scavenging Tubing with 22mm cuffs at 6" intervals (specify length)	11140
Set of 3 adapters	80122

POLLUTION CONTROL EQUIPMENT
BICKFORD OMNICON F/AIR ANESTHESIA GAS FILTER UNIT

BICKFORD PC-2 NON-REBREATHING SYSTEMS



The **BICKFORD PC-2 NON-REBREATHING SYSTEM** is for use in administering anesthesia to small patients up to approximately 10lb. body weight. It offers the advantages of the side vented breathing bag arrangement, plus the advantage of eliminating the unhealthy and annoying discharge of waste gases into the faces of operating room personnel. The PC-2 valve placed at the bag vent permits one hand resuscitation, controlling the vent by thumb pressure while squeezing the bag for manual inflation of the lungs. Waste gases are conducted away through a discharge tube to floor level, or to other disposal means. The NRB elbow provides for standard mask and endotracheal tube connections. Washed-down volume is maximized by placement of the fresh gas supply tube as close as compatibility with standard connectors permits. Since some parts are not conductive, systems should be considered non-conductive.



Complete Systems

PC-2A.....80010
Lightweight plastic NRB mask elbow directly connected to a 1 liter 7/8" neck conductive rubber breathing bag, PC-2 valve, supply and discharge tubing, and connectors for vaporizer outlet. Assembled ready for use.



80010

PC-2B.....80011
Lightweight plastic NRB mask elbow, 1 liter 7/8" neck conductive rubber breathing bag with attached discharge tube terminal, PC-2 valve, 6" x 5/8" diameter pediatric extension tube with 22mm male and 15mm female plastic ends, supply and discharge tubing, connectors for vaporizer outlet.



80011

PC-2C.....80012
Lightweight plastic NRB mask elbow, 1/2 liter conductive rubber breathing bag with plastic adapter to 22mm female, discharge tube terminal, PC-2 valve, 6" x 5/8" diameter pediatric extension tube with 22mm male and 15mm female plastic ends, supply and discharge tubing, connectors for vaporizer outlet.



80012

BAIN CIRCUIT



BAIN CIRCUIT OPTIONS

06820

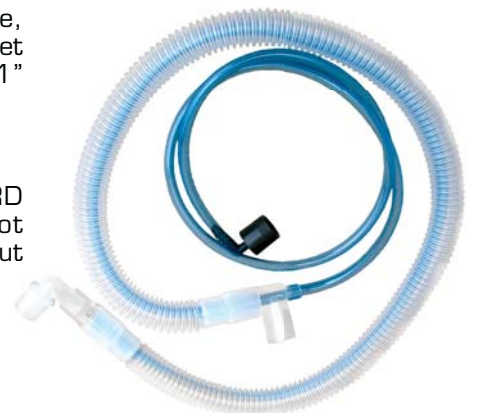
Bain Block Deluxe with pop-off valve, P/N gauge and reservoir bag. Bracket clamps to vertical pole up to 1" diameter as shown.

06810

Bain Block for use with BICKFORD PC-2 sub assembly. (80110) Not shown. Same as 06820 but without pop-off valve and P/N gauge.

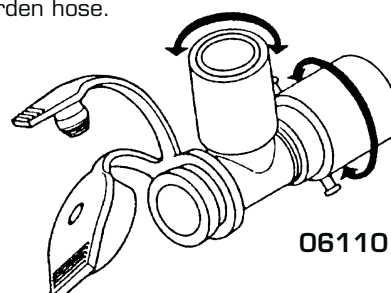
06800

Bain Circuit – Disposable plastic, 30" length with 40" gas supply tube.



PC-2 PARTS & COMPONENT ASSEMBLIES

- 80110 1 Liter Breathing Bag with PC-2 valve and tube terminal.
- 80111 ½ Liter Breathing Bag, with PC-2 valve, and tube terminal.
- (1) 80101 10" x 5/8" Pediatric Extension Tube, with 15mm female end and 22mm male ends.
- (2) 80102 6" x 5/8" Pediatric Extension Tube, with 15mm female end and 22mm male ends.
- (3) 80103 Mask Elbow with gas inlet tube for 3/16" or 1/4" tubing and 7/8" distal end.
- (4) 80104 Bag Adapter, 22mm or 7/8" bag neck to 15mm female.
- (5) 06114 Mask Elbow with gas inlet tube, connects to 3/16" I.D. tubing.
- (6) 80106 PC-2 Valve Complete. Installs in 3/16" breathing bag hole.
- (7) 80107 Mounting Block, supports tube (8) on bag adapter, forming tube terminal.
- (8) 80108 1 3/4" x 5/16" Tube, mounts on (7) forming tube terminal for 1/4" I.D. tubing.
- (9) 80109 Diaphragm-PC-2 Valve, molded neoprene, for replacement.
- (10) 80700 Tubing Splicer, 1/4" or 3/16" I.D. tubing to vaporizer outlet (N.A.D. Vapor).
- (11) 05503 Connector, 1/4" I.D. tubing to 7/8" diameter breathing tube.
- (12) 05504 Connector, 1/4" tube x 23mm male. Connect 1/4" or 3/16" tubing to vaporizer outlet.
- (13) 80113 Adapter, 15mm female to 5/8" pediatric tube, or rolled neck bag.
- (14) 80114 Adapter, 15mm male to 5/8" pediatric breathing tube.
- (15) 05505 Connector, 1/4" tubing x G.H.T. connects 1/4" tubing to standard garden hose.



Swivel Tracheal Tube Connector. Rotates 360° minimizing problems with disconnections. Has access port with caps for biopsy or optical instruments.

- 18552 Connecting Tubing 3/16" I.D. x 5' for fresh gas supply.
- 18453 Connecting Tubing 1/4" I.D. x 4' for waste gas discharge.
- 18711 Replacement Bag, 1 liter.
- 18910 Replacement Bag, ½ liter.
- 80115 Adapter, 22mm male to pediatric breathing tube.
- 80116 Adapter, 22mm female to pediatric breathing tube.



HOSE FITTINGS/MOUNTS



34020S
Surface Mount
Ohio Style,
QC Female



34020R
Recessed Mount
Ohio Style,
QC Female

Also Available
28400C
ceiling plate with
D.I.S.S. Male



34040
Puritan Bennett Male



34010F
Chemtron NCG Female



34010
Chemtron NCG Male



34020F
Ohio Female Hose End



34020
Ohio Male Hose End



24240
D.I.S.S. Female



24800
D.I.S.S. Male



34040F
Puritan Bennett Female



72020 CYLINDER WRENCH
For medical
Post Valve Cylinders

HOSE ASSEMBLY EXAMPLES



Ohio Female Connector
Female D.I.S.S. to
Female Ohio Quick Connect



Ohio Male Connector
Female D.I.S.S. to
Ohio Style Male Quick Connect



D.I.S.S. Female Connector with Nipple
Female D.I.S.S. to Female D.I.S.S.

TO ORDER HOSE ASSEMBLY:

Specify:

1. Gas (O₂, N₂O, VAC, etc.)
2. Hose Length
3. End #1
4. End #2

25000 - HOSE - Specify gas.

Refer to price list for price per foot and prices of end fittings, compute total price of assembly.

SINGLE-STAGE MEDICAL OXYGEN REGULATORS AND ACCESSORIES



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Pressure Regulators For Large Cylinders

- High quality chrome plated forged brass construction.
- D.I.S.S. Outlet.
- Safety Relief Valve.
- Pre-set 50 P.S.I. Outlet Pressure.
- Porous Metal Inlet Filter.
- 0-4000 P.S.I. High Pressure Gauge for Cylinder Contents

- 799822** Oxygen
- 799823** Nitrous Oxide



72011 Pressure Regulator

with high pressure gauge, 0-8 liter per minute flowgauge, and flow control valve, connects to large oxygen cylinders with CGA540 connector.

O₂ Flowmeter

Standard with hand twist female D.I.S.S. inlet

- 60035** 0-8 LPM
- 60036** 0-15 LPM

Ohio QC adapter for inlet of flowmeter available.



71870 Pressure Regulator

Combined with high pressure gauge, 0-15 liter per minute flowmeter, CGA870 yoke connects to small medical oxygen cylinders, provides needle valve flow control.



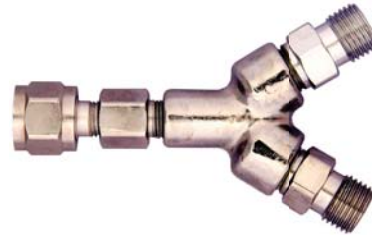
72002 Pressure Regulator

with high pressure gauge, 0-8 liter per minute flowgauge, flow control valve, CGA870 yoke connects to small O₂ medical cylinders.



72003 Swivel Yoke, D.I.S.S. Outlet

50 PSI Preset, Outlet pressure. D and E size small cylinder.

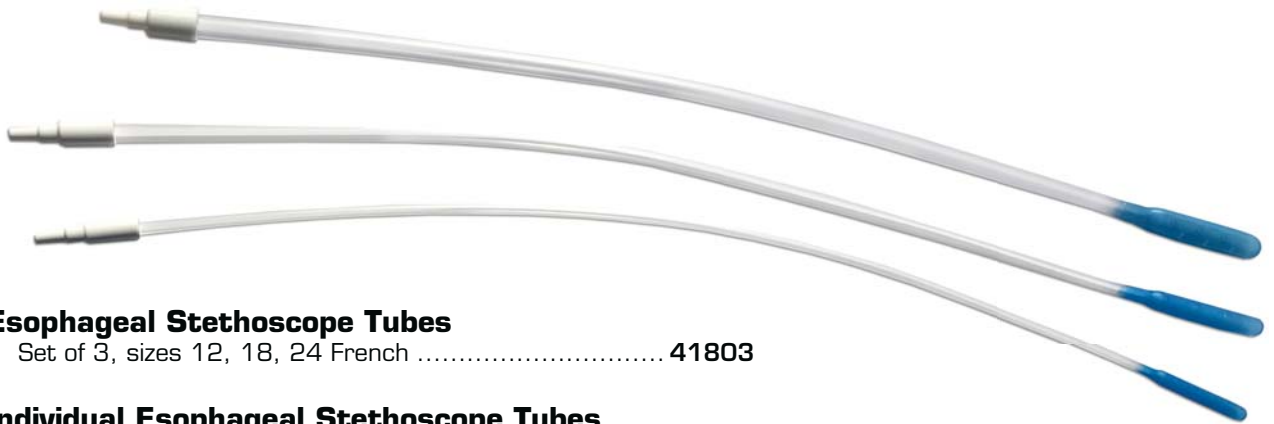


34050 "Y" Adapter

Connect to regulated O₂ supply and provide two D.I.S.S. outlets, one outlet has normally closed valve which opens when mating connector is attached.



ESOPHAGEAL STETHOSCOPE TUBES



Esophageal Stethoscope Tubes
Set of 3, sizes 12, 18, 24 French **41803**

Individual Esophageal Stethoscope Tubes with Connector Adapters

Small Animals

9F x 16" length **41809**
12F x 18" length **41812**
18F x 18" length **41818**
24F x 18" length **41824**

Large Canine

30F x 28" length **42830**
30F x 48" length **44830**

BALLOON CATHETERS 2-WAY BALLOON CATHETERS



50320



45020



45030



45030 - Foley Catheter, Pediatric (2-way), 3 cc balloon, sizes 8 & 10 Fr.

45020 - Foley Catheter, (2-way), 5 cc balloon, even sizes, 12 to 30 Fr.

50320 - Foley Catheter, (2-way), 30 cc balloon, even sizes, 16 & 18 Fr.



ADDITIONAL ACCESSORIES

80113

Adapter provides 15mm standard Female taper end for rubber pediatric $\frac{5}{8}$ " I.D. Br. tube.

80116

Adapter provides 22mm standard Female taper end for rubber pediatric $\frac{5}{8}$ " I.D. Br. tube.

80115

Adapter provides 22mm standard Male taper end for rubber pediatric $\frac{5}{8}$ " I.D. Br. tube.



Reusable Quality Black Conductive Neoprene Breathing Tubes



18001

Adult $\frac{7}{8}$ " I.D. 22mm (or $\frac{7}{8}$ " I.D.) ends 36" length.



18003

Pediatric, $\frac{5}{8}$ " I.D. x 30" long, one end 22mm female, other end 15mm female end fittings are black plastic.



18053

$\frac{1}{4}$ " black conductive tubing

05502

Vaporizer male connector for "cage mount". Fits Fluotec outlet and vaporizers with similar connections.



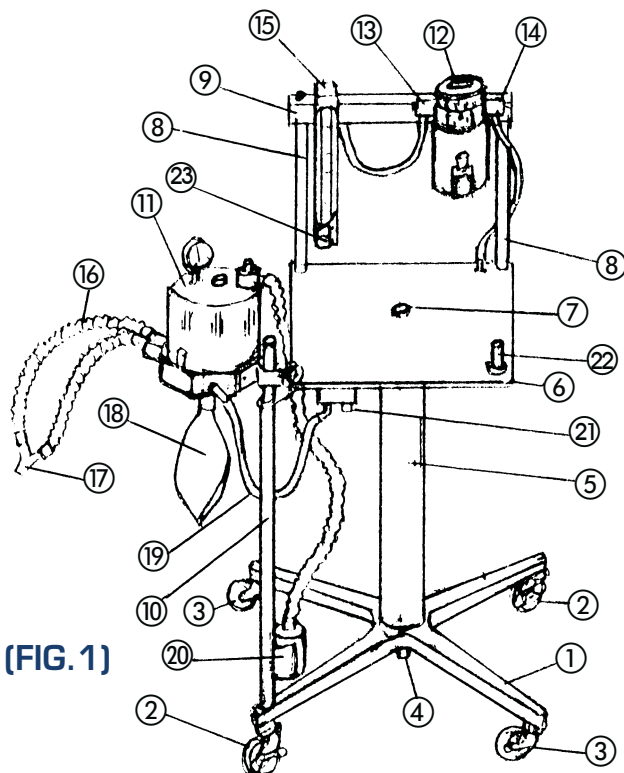
05502A

Vaporizer female connector same as 05502 but female (inlet).



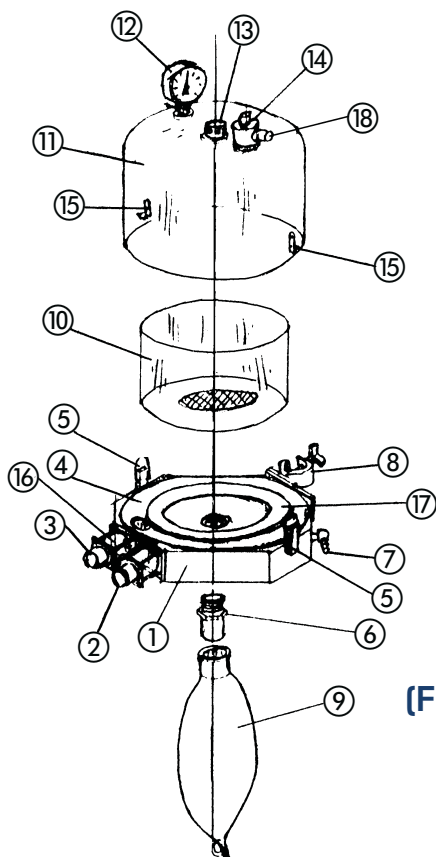
PARTS AND DIAGRAMS FOR ANESTHESIA MACHINE / SUPERSORBER™

Gas Machine Nomenclature Model #51110 (typical)
(FIG. 1)



(FIG. 1)

1. 60039 Base
2. 60040 Caster with brake (2)
3. 60041 Caster (2)
4. 60042 Nut and washer
5. 60043 Center column
6. 60044 Table plate
7. 60045 Center bolt
8. 60046 Support post (2)
9. 60047 Back bar
10. 60048 Absorber mounting post
11. 60000 CO₂ absorber
12. 20010 ISO, 20020 Sevo, Vaporizer
13. 05502A Inlet connection
14. 05502 Outlet connection
15. 60035, 60036 or 5110F Flowmeter
16. 52019, 18001, 18003 Patient breathing circuit
17. 06111 or 06112 Patient "Y" connector
18. Breathing bag, see page 10
19. 18053 Fresh gas supply tube (cut to size)
20. 80120 F/Air waste gas canister
21. 60034 O₂ flush button
22. 60049 Mounting stud for ventilator (optional)
23. 51110V Needle Valve



(FIG. 2)

Supersorber CO₂ Absorber Nomenclature
(FIG. 2)

1. 60015 Base
2. 60004 Inhalation valve
3. 60004B Exhalation valve
4. 60007 Gasket assy.
5. 60008 Toggle clamp
6. 60031 Bag adapter
7. 60053 Fresh gas supply connection
8. 60051 Mounting clamp
9. Breathing bag, see page 9
10. 60002 Soda lime canister (refillable)
11. 60001 Dome housing
12. 60010 Pressure gauge Pos./Neg.
13. 60011 Air inlet/Negative pressure relief valve
14. 80005 Pop-off valve/Positive pressure relief valve
15. 60008B Hook-toggle clamp (2)
16. 60009 Glass Sleeve
17. 60017 Basket Gasket
18. 80005H Pop off valve housing



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PARTS & DIAGRAMS
FOR ANESTHESIA MACHINE / SUPERSORBER™

TERMS OF SALES, WARRANTY, RETURN POLICES, AND REPAIRS

Terms of Sale:

Payment: Unless otherwise specified by A.M. Bickford, Inc., payment is due within 30 days of date of invoice. All overdue accounts are subject to a 1½% per month service charge on the unpaid balance.



Prices: All prices are F.O.B. our facility. Shipping and insurance charges as well as applicable taxes will be added to the invoice. A.M. Bickford, Inc. reserves the right to change prices without notice.

For current pricing, please visit our internet site at www.ambickford.com or call us toll free 1-800-795-3062.

Warranty:

Major equipment is covered by individual warranties. Other merchandise is guaranteed to be free from defects in workmanship or material for a period of 30 days. Some exceptions apply to rubber goods and plastic goods. (See "Returns" below.)

In cases where a warranty card is included with new equipment, the card must be filled out by the customer and returned to A.M. Bickford, Inc. in order for the warranty to be registered.

Returns Policies:

No merchandise may be returned for credit without prior written approval or after 30 days from date of invoice.

Returns are subject to a 15% handling charge which will be deducted from the original purchase price. Exceptions are those items acknowledged by A.M. Bickford, Inc. to be defective, or shipped in error.

Rubber and plastic goods are guaranteed against defects at the time of delivery and may not be returned for credit if used or if sterile packaging is opened.

Merchandise that has been damaged by the purchaser can only be credited if repairs are possible. Repair charges will be paid by the purchaser as well as a 15% handling fee.

Warranty returns must have documentation that the item was purchased within the stated warranty period. If there is no defect in the item, there will be a 15% handling fee deducted from the purchase price.

Repairs:

When a customer experiences a problem with the operation of equipment, it is suggested that he/she contacts our service department via our toll free number. To assist a customer in describing perceived malfunctions in the anesthesia machine, see page 16 for parts diagram. In some cases, assistance can be given on the phone. If this is not the case, then an instrument may be sent in for repair.

A.M. Bickford, Inc. realizes the importance of customers' anesthesia equipment to the operation of their practice and the health of their patients. When equipment is received for repair, that equipment is given priority status, repaired and returned in as little time as possible. When a repair is being sent in, it is extremely helpful if we are notified via our toll free number about the problem so we can be alerted and prepared.

Loaner Program:

There is free loaner equipment available for units that are being repaired. Upon the return of your equipment, the loaner unit must be returned within 7 days or there will be a charge for rental of the loaner. Shipping costs of the loaner will be charged to the customer.



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TERMS | WARRANTY | RETURN | REPAIRS
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FI-8000P RIKEN GAS INDICATOR FOR ANESTHETIC VAPORIZER CALIBRATION

- LARGE LCD SCREEN
(THREE AA BATTERIES INCLUDED)
- BUILT IN SAMPLE PUMP
- DIRECT DIGITAL READOUT
- FOUR ANESTHETIC GASES
- NO CONVERSION FACTORS



The FI-8000P is a portable, light weight solution for the measurement of anesthetic gas concentration. Ideally suited for accurately and quickly checking the calibration of anesthetic vaporizers.

A.M. BICKFORD, INC.

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www.ambickford.com

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