BLUEPRINT FOR BREATHING

Introducing the A.D.S. 2000...
An Unprecedented Breakthrough in Anesthesia Delivery

Features:

- Microprocessor Controlled
- Automatic Safety Self Diagnostic Test
- The Liquid Crystal Display Shows the following:
  - Minute Volume
  - Tidal Volume
  - Breathing Cycle
  - Inspiratory Time
  - Breaths per Minute
  - Flow Rate
  - P.I.P
  - Assist Setting
  - P.E.E.P.
  - Patient Weight
  - Patient / Machine Initiated Breath

A.D.S. 2000 VETERINARY ANESTHESIA DELIVERY SYSTEM

A.D.S. 2000 Specifications

	Input Pressure	Patient Weight	Flow Rates	Breaths Per Minute	P.I.P. (cm. / H20)	P.E.E.P. (cm. / H20)	Assist (cm. / H20)
NORMAL MODE	50psi	1.0 to 68 Kg.	2.0 to 60 LPM	1 to 95	5.0 to 35	0.0 to 9.0	-0.3 to -6.0
LAB MODE	Switch (5 psi)	Under 1.0 Kg.	0.2 to 6.0	1 to 95	5.0 to 35	0.0 to 9.0	-0.3 to -6.0
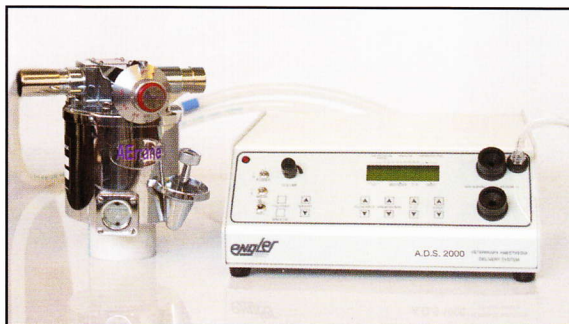
MADE IN THE USA

- Internal, up to 12 hour emergency battery backup
- Mask mode to maintain patient on mask
- Breathe function, for a manually assisted breath at any time
- Fill and hold mode for Thoracotomy
- Mechanical "pop off" valve, incorporated for additional safety
- "On the fly" adjustments of ALL parameters
- Instructional DVD / operation manuals
- Rear panel switch alternating between normal and lab mode

ANESTHESIA MADE SIMPLE

engler engineering corporation

Technical Data:

Power Supply:	110 VAC 60 Hz or 100-240 VAC 47-63 Hz
Dimensions:	Width 10" x Length 10" x Height 4" (254mm x 254mm x 102mm)
Net Weight:	10 lbs. (4.5 kg.)
Shipping Weight:	18 lbs. (8.1 kg.)

FC ICES-003   CE

A.D.S. 2000 DESCRIPTION

Presenting the A.D.S. 2000, a microprocessor controlled anesthesia delivery system / positive pressure ventilator.

The A.D.S. 2000 represents an advanced way of delivering anesthesia which enhances safety while in surgery. This device completely changes the way anesthesia and ventilation therapy is administered to veterinary patients. With the knowledge that the patient is always breathing, the veterinary practitioner can completely focus on the procedure at hand without distraction.

The A.D.S. 2000 is not an accessory, it is a stand alone anesthesia / ventilator delivery system. It can be easily attached with the provided hoses and tubing to a precision vaporizer and regulated oxygen source. The A.D.S. 2000 can also be used without a vaporizer strictly as a ventilator unit. With two built in modes available, it can can ventilate and deliver anesthesia to a wide range of animals. In NORMAL MODE the patient weight ranges from between 1 and 68 kilograms. In the LAB MODE patient ranges from below 1 kilogram to as small as a 100 gram patient. This Lab mode feature is ideal for exotic and small animal surgery.

The A.D.S. 2000 contains an internal battery backup with the capability of operating as a portable unit for a period of up to 12 hours. This backup system also supplies protection against power surges and blackouts.

The A.D.S. 2000 is controlled by an electronic microprocessor. This microprocessor is preprogrammed with the necessary breathing parameters which controls a combination of electronic valves and electronic sensors. The electronic valves are open only on the inspiratory thus reducing waste gases and risk of gases escaping into the operating room.

The A.D.S. 2000 preset parameters are fully programmed so that the Veterinarian can enter the patient weight and the A.D.S. will automatically display the breathing parameters for that patient. However, if the operator determines that the patient requires other values, the preset breathing parameters can be altered at any time. This feature gives the operator complete control of administering anesthesia to the patient.

Comparing the A.D.S. 2000 to conventional negative pressure systems: With negative pressure systems the patient may take a shallow breath and other times a deeper breath causing an inconsistent depth of anesthesia.With the A.D.S.2000 (positive pressure) the patient will always receive a consistant breath based on the set breathing parameters, allowing the patient to achieve a linear depth of anesthesia. This makes it easier to maintain a patient on lower vaporizer settings which is considered safer.

VOLUME
This feature controls the volume of the alarm sound level.

POWER
ON/OFF Switch for the A.D.S. 2000

MASK
This switch activates and deactivates the mask mode

SET / RUN
In the set position: This is a stand by mode that allows the operator to enter the patients weight. In the RUN Position the A.D,S. 2000 ventilates the patient.

FILL / HOLD BUTTONS
By depressing this button the A.D.S. 1000 fills the patients lungs to the set peak inspiratory Pressure and holds at that pressure until the button is released.

TOGGLE SWITCH (50 psi / 5 psi)
Located on back panel this Switch allows user to alternate between normal and lab mode.

BREATHE BUTTON
Depressing this button initiates a breath outside of the preset cycle.

LCD DISPLAY
LCD Screen. Displays the Minute number, Inspiratory time, Flow rate, Breaths per minute, Peak inspiratory pressure and Assist vacuum number.

WEIGHT BUTTONS
With the A.D.S. 2000 in set mode: These buttons allow the operator to enter the weight of the patient in kilograms.

FLOW RATE BUTTONS
These buttons will increase or decrease the flow rate of gases to the patient.

BREATHS / MIN. BUTTONS
These buttons control the number of breaths per minute delivered to the patient.

ASSIST BUTTONS
These buttons establish the level of inspiratory effort (vacuum) measured in centimeters of water. Depending on the sensitivity set, this feature will register a patient's breath (DEMAND MODE) and the A.D.S. 2000 will follow through with a complete breath based on the preset parameters.

EXTERNAL GAS SAMPLING SYSTEM
This circuit allows the sensing of gas pressure

INSPIRATORY EXPIRATORY PORTS
The breathing circuit is connected to these ports.

PEAK INSPIRATORY PRESSURE (P.I.P)BUTTONS
These buttons control the peak inspiratory pressure measured in centimeters of water which the A.D.S. 2000 will administer to the patient (based on pressure not volume).