

A Modification for the Use of the Bird Mark 2 Ventilator

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A simple reliable new anesthesia ventilator has been described recently.¹ The ventilator produces positive pressure in the outer, plastic part of a double bag ("Pneumo bag") and thereby compresses the inner reservoir bag. Following our suggestion, this compact and inexpensive ventilator has been built into an anesthesia apparatus,* with very satisfactory results.

However, we have found it difficult to assess the adequacy of ventilation by observing the double bag. In our experience, the outer plastic bag prevents adequate monitoring of the inner reservoir bag either visually or by the usual "hand on the bag." We have therefore

substituted a Roswell Park Ventimeter† for the Mark 2 double bag (fig. 1) by attaching the venturi drive to the manual bag connection on the Ventimeter. This arrangement allows breath-by-breath tidal volume monitoring. The overflow valve on the Ventimeter vents at the end of the expiratory phase and eliminates the need for the Gas Balance Valve furnished with the Bird Mark 2 Respirator. Also, the Ventimeter can be used with flammable agents. In actual use we have found the tidal volume indicated on the Ventimeter bellows to be close to expired volume measured at the mouth.

REFERENCE

1. Ahlgren, E. W., and Stephen, C. R.: A new mechanical ventilator for use during anesthesia, *ANESTHESIOLOGY* 28: 952, 1967.

† Air Shields, Inc., Hatboro, Penna.

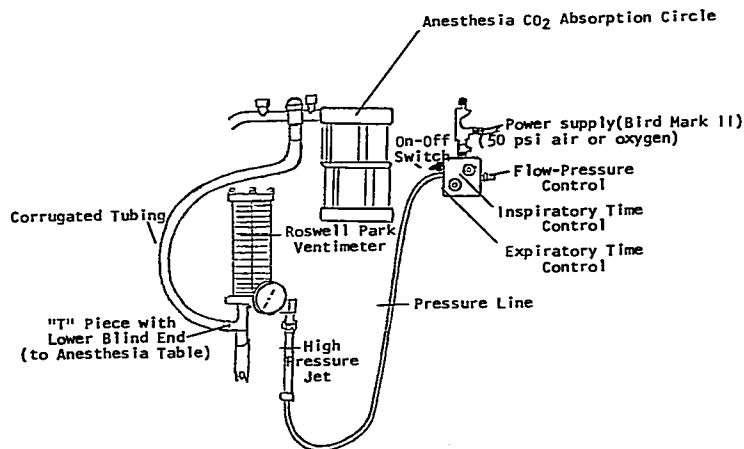


FIG. 1. Ventilator components and assembly.