



DPA 02™

Diamedica Portable Anaesthesia System

INSTRUCTIONS AND USER GUIDE

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INSTRUCTIONS FOR PORTABLE ANAESTHETIC MACHINE DPA 02™



The Diamedica Portable Anaesthetic machine DPA 2™ has three principal components; vaporiser, reservoir, and breathing system. It can be rapidly assembled ready for use as follows;

(1) The vaporiser

Remove the vaporiser from the container and place it on the wire grill.
Fix the vaporiser to the stand using the captive screw at the back of the upright section.

(2) The reservoir. See Fig 1

The following parts of the reservoir are identified;

- A. The pressure relief valve with outlet pressure set at 7.5cm water.
- B. The air entry one way valve with arrows indicating direction of air flow.
- C. The oxygen supplementation port (metallic nozzle).
- D. The 2 litre reservoir bag.
- E. Vaporiser.
- F. A solid block with four openings and a metallic nozzle.

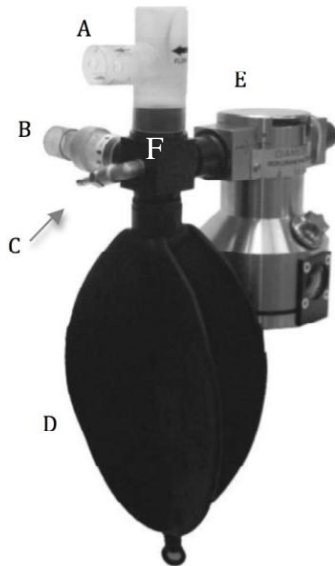


Fig 1

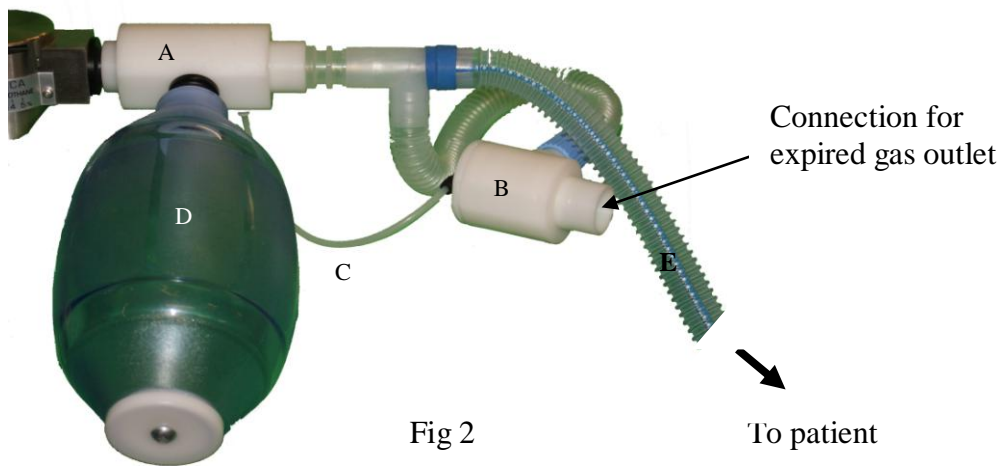
Assembly of reservoir.

1. While standing in front of the vaporiser and facing the anaesthetic machine, hold the reservoir block so that the metallic nozzle is on the left and pointing away from you.
2. Attach the reservoir block to the input port on the left side of the vaporiser
3. With the reservoir block firmly in place attach as follows;
4. To the rear port attach the air entry valve with the arrows pointing forward
5. To the top port attach the pressure relief valve so that it stands vertically.
6. To the bottom port attach the green reservoir bag
- 7 To the metallic nozzle attach the clear oxygen tubing from the oxygen source.

(3) The breathing system. See Fig 2

The following parts of the breathing system are identified;

1. The valve unit. This consists of two separate white cylindrical valves known as the inspiratory (A) and expiratory (B) valves, connected by a 20 cm length of clear narrow tubing (C). The inspiratory valve is long, narrow and has a side port. The expiratory valve is short, wide and has a metal spur.
2. Blue coloured self inflating bag. (a smaller size is available for children)
3. A 2 meter length of corrugated double lumen respiratory tubing (E) having a 20 cm side arm at the proximal end.
4. A 1 litre reservoir bag to act as test lung.
5. A length of standard respiratory tubing for scavenging of expired gases.

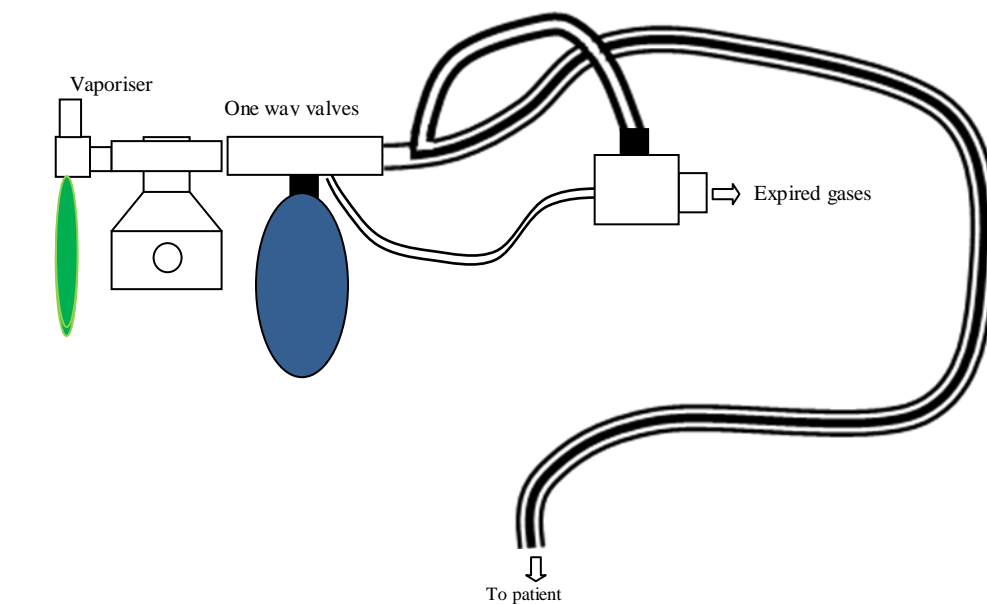


Assembly of breathing system.

1. Attach the narrow inspiratory valve (A) to the exit port of the vaporiser. Rotate the valve so that the side port points downwards and forwards at an angle of approx. 45 degrees.
2. Attach the blue self inflating bag (D) to the sideport of the inspiratory valve so that it lies in front of the container pointing downwards
3. Attach the proximal end of the corrugated respiratory tubing to the inspiratory valve and rotate respiratory tubing until the 20 cm side arm points backwards.
4. Take the expiratory valve (B) and insert the protruding metal arm into the opening located at the right anterior corner of the inside of the case. Tighten the metallic screw located below the expiratory valve to secure it in position.
5. Connect the 20 cm sidearm at the proximal end of the respiratory tube to the expiratory valve.
6. Attach scavenging tube to expiratory valve.

To test the assembly; Attach the test lung (1 litre green reservoir bag) to the patient end of the respiratory tubing and confirm the integrity of the system using the self inflating bag.

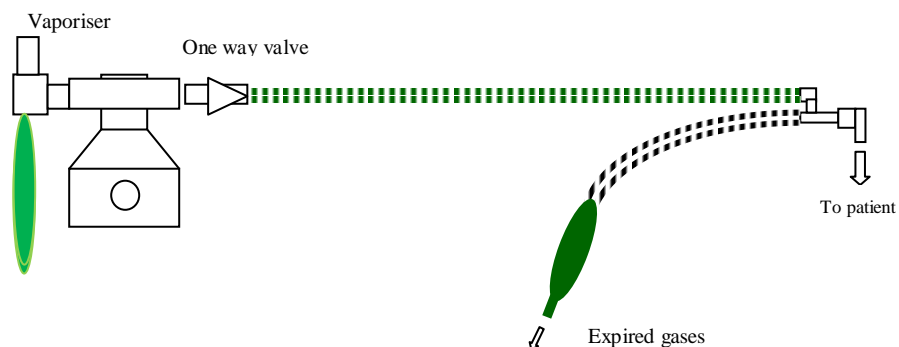
Main Circuit



Ayres 'T' Piece paediatric circuit

It is recommended that this circuit should be used with a minimum fresh gas flow from concentrator or cylinder of at least 2 x the patients minute volume.

If the supplementary flow rate is greater than 4 lt/min the patient circuit can be replaced with a paediatric circuit (Mapleson F) suitable for continuous flow / assisted ventilation with small children.



Detail of patient circuit valve arrangement and operation

